POTW PRETREATMENT PROGRAM AUDIT

Audit Date(s)	POTW Name
June 27, 2002	New Castle County

Contact Name	Title	Telephone	
James Houston	Environmental Compliance Manager	302-395-5806	
Address	187-A Old Churchmans Road New Castle, DE 19720		
		Yes	No
Should this be the person on the mailing list?		X	

Participants				
	Name	Title	Organization	Telephone
1	John Lovell	Pretreatment Coordinator	EPA	215-814-5790
2	David Bowie	Environmental Engineer	New Castle County	302-395-5728
3	Michael Harris	Environmental Administrator	New Castle County	302-323-2611
4	James Houston	Env. Compliance Manager	New Castle County	302-395-5806

NOTE: For Sections I through VIII, complete background sections based on information in pretreatment files and all other sections based on discussion with POTW personnel.

SECTION I: GENERAL INFORMATION

A. Background - Complete prior to onsite activity

1	Date of last annual report:	February 25, 2002
	List unresolved issues.	No implementation issues, but influent monitoring data suggested that a closer look at some of the new proposed local limits may be warranted. NCC will collect more data and revise the limits if necessary.
2	Date of last audit:	March 26, 1997
	List unresolved issues.	None.
3	Date of last field audit:	May 13, 1999
	List unresolved issues.	None
4	Number of treatment plants:	1

NPDES Number	Issuance Date	Expiration Date
DE0050547	November 1, 1998	October 31, 2003

5 a. Measures of Success - Compliance with NPDES toxics limits (measure 3)

Year	Category 1	Category 2	Category 3
2001	No violations reported		
2000	No violations reported		
1999	No violations reported		
1998	No violations reported		
1997	No violations reported		

b. Measures of Success - Compliance with other NPDES limits (measure 4)

Year	Category 1	Category 2	Category 3
2001		TSS(1)	TKN(1/1), P(5/5)
2000		TKN(1)	P(1/1)
1999			P(3/3)
1998	No violations reported		
1997	No violations reported		

c. Measures of Success - Compliance with sludge limits (measure 5)

Year	Category 1	Category 2	Category 3
2001	No violations reported		
2000	No violations reported		
1999	No violations reported		
1998	No violations reported		
1997	No violations reported		

6	Any effluent or sludge violations in the past 12 months?	Yes	No	
		X		

Parameter violated	Date(s)	Cause(s)
TSS	8/01	annual report indicated broken flocculator
TKN	5/01	annual report indicated lagoon turnover
Phosphorus	6,8,9,11,12/01	

7	Does the permit(s) require pretreatment implementation?	Yes	No	
		X		
8	Does the permit(s) have a schedule for pretreatment program implementation/modification?	Yes	No	
		X		

Activity	Milestone Date	Completion Date
Respond to comments on 10/1/97 local limit submission	2/1/99	12/29/98
Adopt revised local limit	10/7/02[1]	

9	List any pending program modifications and current status (verify during onsite activity).	- Local limits submission not yet approved. Comments on annual report review dated 3/11/02 raised some additional concerns on copper, cyanide, nickel, and silver based on the monitoring data included in the annual report. NCC letter of 5/21/02 responded to the comments and indicates that additional data will be collected. EPA letter of 6/7/02 accepted the local limits submission. - Draft revisions to the County's ordinance were submitted on 4/30/02. Comments were made and the County must now revise the draft.

[1]Within 4 months of acceptance of revisions - EPA letter of June 7, 2002 accepted revisions based on the County's response to previous comments.

SECTION II: LEGAL AUTHORITY

A. Background - Complete prior to onsite activity

1 List all municipalities served by POTW and applicable legal authorities (verify during onsite activity).

Municipality Name	Ordinance Date	Agreement Date	Any IUs? (X all that apply)		
			SIUs	IUs	None
New Castle County	9/18/96[2]	N/A		X	
Town of Middletown[3]	5/5/97	8/2/76	X		
Odessa				[4]	
Townsend		10/10/01		[4]	

2 Was a legal authority review previously conducted?

Yes	No	Date	Reviewer
X		6/17/02	EPA

Describe any inadequacies not yet corrected. See attachment 1.

3 Does the POTW's ordinance provide for variances and/or special agreements?

Yes	No
X	

If yes, does it:	Yes	No	N/A
specifically prohibit changes to both categorical standards and other federal pretreatment requirements (e.g., reporting)?		X	
establish a cap based on the current MAIL for revised local limits?		X	
require that the revised limit or requirement be granted in writing?		X	

B. Current

1	Update POTW's progress on correcting deficiencies.	The County reports that they are working on corrections.
2	When did the POTW last review its ordinance to ensure that it is consistent with the POTW's current program implementation?	A review is currently underway in conjunction with the changes required by EPA.

[2]Date of most recent amendment.

[3]Since the date of the audit, Middletown has completed construction of its own treatment plant and no longer sends flow to the County treatment plant.

[4]No SIUs; unclear whether commercial users exist or if service area is completely residential.

3	Do any outside agencies implement all or part of the pretreatment program within the POTW's service area?	Yes	No
			X

SECTION III: APPLICATION OF STANDARDS

A. Background - Complete prior to onsite activity

1	Has the POTW stated in any annual reports since the last audit that problems (e.g., inhibition/upset, pass through, sludge contamination, corrosion, toxic fumes, etc.) have been caused by IU discharges?	Yes	No	
			X	
2	a. Date of last local limits submission:	10/1/97[5]		
	b. Date of acceptance:	6/7/02		
	c. Date of approval:			
	d. If not accepted and approved, list status:	Comments on annual report review dated 3/11/02 raised some concerns on copper, cyanide, nickel, and silver based on the monitoring data included in the annual report. NCC letter of 5/21/02 responded to the comments and indicates that additional data will be collected. EPA letter of 6/7/02 accepted the local limits submission.		
3	Are the approved local limits allocated in the submission or left to be allocated in the permits?	Submission, but the ordinance allows for variances.		
4	List all CIUs subject to production-based standards (with category):	Johnson Controls (Battery Manufacturing)		
5	Does the approved program include procedures for acceptance of hauled waste?	Yes	No	
			X	
	Describe.	The approved ordinance includes acceptance of hauled waste, but the hauled waste is only accepted at a location that goes to the Wilmington treatment plant and is considered to be regulated under the Wilmington pretreatment program. No provisions are made to accept hauled waste under the New Castle County program and the MOT treatment plant.		
6	Did the POTW include loadings from waste haulers in its local limit development?	Yes	No	N/A
				X

[5]Several subsequent revisions to the submittal have been made with the most recent one being 2/8/02.

7 a. Measures of Success - Influent (measure 1)

Year	Category 1	Category 2	Category 3
2001	As, Cd, Cr, Pb, Hg, Zn, PCBs	Cu(1/4), CN(3/4), Ni(1/4), Ag(1/4), Cr^{+6}(3/4)	
2000	As, Cd, Cr, Zn, Al, Be, Cr^{+6}, Tl	Cu(1/4), Ni(2/4)[6], Se(1/4), Ag(1/4), Pb(1/14)	As[7], Al[7], Be[7], CN[8], Hg[9], PCBs[9]
1999		Pb (1/9), Ni (2/3)	Cd (3/3), Se (3/3) Ag, Hg, PCBs all non-detectable but at levels above the MAHC. No monitoring for Zn or As. No third quarter influent results.
1998			Reported annual average for lead exceeds the maximum allowable headworks concentration calculated during the 1990 local limits reevaluation.
1997			Reported annual average for lead exceeds the maximum allowable headworks concentration calculated during the 1990 local limits reevaluation.

b. Measures of Success - Influent Exceedances (measure 1.1)

Year	Category 1	Category 2	Category 3
2001	As, Cd, Cr, Pb, Hg, Zn, PCBs	Cu, Ni, Ag, Cr^{+6}	CN

[6]1 result non-detectable but the detection limit was above the MAHC, and 1 result above the MAHC.

[7]Only 3 of required 4 samples reported.

[8]3 results non-detectable but the detection limit was above the MAHC, and 1 result above the MAHC.

[9]All 4 results non-detectable but the detection limit was above the MAHC.

	c. Measures of Success - Sludge (measure 2)			
	Year	Category 1	Category 2	Category 3
	2001		No data	
	2000		No data	
	1999		No data	
	1998		No data	
	1997		No data	

B. Industrial User Characterization				
1	When was last IWS completed?	Countywide survey for all industries not conducted recently, but the County does target specific industries for a survey when a new effluent guideline comes out (1997 for PFPR and 2002 for CWT and TEC).		
2	How does the POTW locate new IUs?	Under the land use program the County approves building permits and sewer connections. Companies will also ask for applications when they are planning to connect.		
3	How does the POTW investigate changes at existing IUs (e.g.,non-SIU to SIU, NSIU to CIU)?	Users need approval to increase sewer discharges. Changes also discovered through sewer billing.		
4	How are changes discovered in contributing jurisdictions?	When it was connected, Middletown would update the survey within the Town and notify the County of new users (Middletown no longer connected to the system). County handles it for the rest of the service area.		
5	Does POTW maintain list of non-SIUs?	Yes	No	Update freq.
			X[10]	

C. Recently Promulgated Categorical Standards		
1	What has the POTW done to identify users subject to new categorical standards promulgated in the last 5 years[11].	After promulgation of a new standard, the County conducts a targeted survey to identify users in that category.

[10]No formal list is maintained, although the billing depeartment does have a complete list of all customers.

[11]This would include Waste Combustors (1/00), Transportation Equipment Cleaning (8/00), and Centralized Waste Treatment (12/00).

2	Has the POTW amended permits for users subject to categorical standards amended in the last five years[12]?	N/A			
D. Local Limits					
1	Is the POTW aware of instances of pass through, treatment plant inhibition/upset, sludge contamination, or other problems (excessive corrosion, toxic fumes, sewer blockages, etc.) during the past year, including problems caused by conventional wastes?	Yes	No		
			X		
2	Is the POTW aware of any instances where workers have experienced industrial waste-related injuries or illnesses?	Yes	No		
			X		
3	If the POTW allocates local limits through the permits, do they have a mechanism to track the allocations?	Yes	No	N/A	
			X[13]		
4	What has the POTW done to address category 2 or 3 ratings (most recent year) for influent and sludge?	The County has had internal discussions, but has taken no other actions.			
E. Standards and Requirements for IUs					
1	Does the POTW have any questions/problems in the categorization of IUs?	Yes	No		
			X		
2	List all IUs where the combined wastestream formula was applied.	None			
3	Does the POTW have a list of new source dates for all categorical industries?	Yes	No		
		X[14]			
4	Has the POTW made a specific evaluation of process construction dates in relation to the new source date of any applicable categorical standards?	Yes	No		
		X			
5	List all IUs subject to Pretreatment Standards for New Sources.	None			

[12]This would include Pulp & Paper (4/98) and Pharmaceutical Manufacturing (9/98).

[13]The County ordinance has uniform concentration limits, but the County does grant variances to the limits as allowed by the ordinance. The County does not have a mechanism for tracking the loading allocations relative to the maximum allowable industrial loading.

[14]List provided to the County during the audit.

6	If present[15], does the POTW regulate CIUs for which a no discharge standard exists?	N/A			
7	Has the POTW granted any net/gross variances?		Yes	No	
				X	

F. Hauled Wastes

1	Does the POTW accept wastes by truck, rail or dedicated pipe? (If no, go to Section V)	Yes	No	
			X	

SECTION IV: CONTROL MECHANISM

A. Background - Complete prior to onsite activity

1	Provide the # of IUs based on the most recent file information:	SNIUs	CIUs	Other	Total
		0	2	0	2
2	a. List all SIUs without control mechanisms or with expired control mechanisms (and the date of expiration).	None			
	b. Identify which of these users have administratively extended control mechanisms.	N/A			
3	According to the approved program, what type of control mechanism was intended to be used to regulate industrial discharges?	permits			
4	What industries does the approved program indicate will be regulated through this control mechanism?	non-domestic users			
5	What is the maximum control mechanism duration indicated in the approved program?	≤5 years			
6	Measures of Success - Permit issuance rate (measure 13 - see attachment 2)				

B. Control Mechanism

1	Give the current # of IUs:	SNIUs	CIUs	Other	Total
		0	2[16]	0	2[16]

[15]CIUs with no discharge standards include: feedlots, inorganic chemicals manufacturing, fertilizer manufacturing, nonferrous metals manufacturing, steam electric power generating, timber products, oil & gas extraction, paint formulating, ink formulating, pesticide chemicals, battery manufacturing, metal molding & casting, porcelain enameling, aluminum forming, and nonferrous metals forming & metal powders.

[16]Both users are located in Middletown, and therefore are no longer connected to the system.

2	Have all expired control mechanisms been re-issued?	Yes	No	NA
				X
3	What type of control mechanism is currently being used?	Permits		

SECTION V: COMPLIANCE MONITORING				
A. Background - Complete prior to onsite activity				
1	As required by the approved program, list the frequency for:	CIU	SNIU	
	POTW sampling of IUs	≥2/year	≥2/year	
	POTW inspection of IUs	≥1/year	≥1/year	
	IU self-monitoring	≥2/year	≥2/year	
	IU reporting	≥2/year	≥2/year	
2	In the last year, indicate frequency of:	CIU	SNIU	
	POTW sampling of IUs	7 - 8	N/A	
	POTW inspection of IUs	1	N/A	
	IU self-monitoring	4 - 12	N/A	
	If less than required by the approved program or less than 1/yr (403.8(f)(2)(v)), explain.	N/A		
3	List all SIUs that were found to have been not sampled or not inspected in the last annual report.			
	Name of IU	NS/NI/B[17]	Reason	
	None			
4	Measures of Success - Sampling and Inspection Coverage (measures 11 and 12 - see attachment 2)			
B. POTW Sampling and Inspection				
1	Update status of users listed in the table in A.3:			
	Name of IU	NS/NI/B	Date planned/completed	
	N/A			
2	Does the POTW have written standard operating procedures for sampling?	Yes	No	
		X		

[17]NS = not sampled, NI = not inspected, B = both not sampled and not inspected.

3	Does the POTW collect its own samples, or are they collected by a contractor?	POTW		
4	Are pH, oil & grease, cyanide, volatile organics, total phenol, sulfide, and hexavalent chromium collected by grab sample?	Yes	No	NA
		X		
	If so, how many grab samples are used?	1		
5	Are composite samples used for all other pollutants to evaluate compliance with:	Yes	No	NA
	Categorical standards?	X		
	Local limits?	X		
	Is any unannounced sampling conducted?	X[18]		
6	Is POTW prepared to take samples on short notice (i.e., vehicles, personnel, preservatives, etc. available)?	X		
7	How much time normally elapses between sample collection and obtaining analytical results?	Typically 1 month, although results are always received by the end of the quarter.		
8	What factors does the POTW consider in determining whether a user is required to develop a slug/spill control plan?	Type of manufacturing operations, storage complexity of the facility, past history of slugs, potential for problems, and the existence of floor drains at the facility.		
9	Does the POTW have procedures (e.g., identify waste, response personnel, identify key manholes, etc.) and equipment to investigate causes and sources of unknown slugs/spills to the POTW (including collection system)?	Yes	No	
		X		
	If yes, describe.	The system is computerized, and the County has identified key manholes throughout the system to quickly locate the source of a problem. Also have staff devoted to the collection system which can be used to help trace problems.		

C. IU Self-Monitoring and Reporting			
1	As currently conducted, list frequency for:	CIU	SNIU
	IU self-monitoring	2 - 52/year	N/A
	IU reporting	2/year	N/A
	If less than required by the approved program, explain.	N/A	
2	How does the POTW verify that IUs report all sample results if they sample more frequently than required?	Review of IU files at the time of the inspection.	

[18]MacDermid sampling is announced because the user discharges in batches and the County calls to ensure that a discharge will be occurring when they sample.

3	Do any IUs discharge hazardous waste?	Yes	No	
			X	
	If no, how does POTW verify this?	Through the inspections.		
4	Does the POTW have procedures to monitor and control IUs when they close?	Yes	No	
		X		
	If yes, describe.	County continues to sample during the closure to ensure that dumping does not occur.		

SECTION VI: ENFORCEMENT

A. Background - Complete prior to onsite activity

1 Based on the most recent file data, list the SIUs in SNC.

Name of IU	1st quarter of SNC	SNC params.	Describe enforcement taken with date	Scheduled compliance date
None				

2 Measures of Success - SNC rates (measures 6, 7, and 8 - see attachment 2)

B. Enforcement

1	When the POTW receives IU self-monitoring reports, how does it evaluate user compliance, including limits, completeness and timeliness of reports, and submission of resampling data?	Manual comparison to permit requirements.		
2	How often does the POTW evaluate for SNC?	When needed based on when violations occur; no more frequently than twice per year since reports are received twice per year.		
	Does the POTW document its SNC evaluation?	Evaluation summary sheet		
	For what period was the last evaluation completed?	July through December 2001		
3	Have there been instances where the POTW found the responses in its ERP to be inappropriate?	Yes	No	NA
			X	
4	Has POTW taken enforcement against all instances of pass through/interference in the last year?	Yes	No	NA
				X

5	Update based on most recent SNC period (July - December 2001[19])			
Name of IU	1st quarter of SNC	SNC params.	Describe enforcement taken with date	Scheduled compliance date
Johnson Controls	4Q'01	reporting	None	
MacDermid	2Q'01	Ni, Cd, Cu	None	

SECTION VII: DATA MANAGEMENT AND PUBLIC PARTICIPATION					
A. Data Management					
1	Are all records maintained for at least 3 years?	Yes	No		
		X			
2	How does the POTW keep up-to-date on regulations and technical guidance for the pretreatment program?	EPA mailing, web site, seminars			
B. Public Participation					
1	Are records available to the public (403.14(c))?	Yes	No		
		X			
2	Have IUs requested that data be kept confidential?	Yes	No		
		X			
	If yes, what type of data was it, and how has the POTW handled it?	Material reviewed and sent back to the user if not needed.			

SECTION VIII: PROGRAM RESOURCES		
1	Approximately how many person-years does the POTW devote to the pretreatment program?	0.1
2	In what areas does the POTW need additional resources?	None identified.

[19]This is the most recent SNC period for which data was available at the time of the audit.

3	What additional activities (if any) has the POTW undertaken to further the goals of the pretreatment program?	Additional focus on coordination between pretreatment program and other groups. Lab data is on a shared drive on the computer system and there are quarterly meetings between the pretreatment coordinator and the lab; working with the land use group to ensure that the pretreatment coordinator is notified of new connections; sewer maintenance group is focusing more closely on approval of grease traps for oil & grease program.
4	What has the POTW done to incorporate P2 practices into its pretreatment program?	During the drought, the County looked at flow reduction at the users.

SECTION IX: INDUSTRIAL USER FILE EVALUATION			
IU Name	Johnson Controls Battery Group, Inc.		
Category	Battery Manufacturing	PWF[20]	7284
Address	700 N. Broad Street, Middletown, DE 19709		
Comments	Manufacture lead acid storage batteries. Permit limits developed based on flow of 7284 gpd, annual production of 2,457,947 batteries and 241 production days (10,199 batteries per day), and 19 lbs of lead per battery (193,781 lbs of lead per day). The user is not reporting production on its self-monitoring reports.		
IU Name	MacDermid, Inc.		
Category	OCPSF	PWF	
Address	701 Industrial Drive, Middletown, DE 19709		
Comments	Manufacture photo sensitive resins and films; package washout chemistry (SIC 2821 and 2672).		

[20]Process waste flow

NOTE: Complete all questions with a "Y" (yes), "N" (no), "N/A" (not applicable), "U" (unable to determine), or the appropriate number.

FILE REVIEW CHECKLIST	IU1	IU2
A. Industrial User Characterization		
1. Is the IU categorical (CIU), significant non-categorical (SNIU) or other (O)?	CIU	CIU
2. Is the IU properly categorized?	Y	Y
B. Control Mechanism		
1. Does the file contain:		
• an updated control mechanism application and/or survey questionnaire?	Y	Y
• a current control mechanism?	Y	Y
• documentation[21] of how control mechanism limits and requirements were established?	Y[22]	N
2. Does the control mechanism include:		
• correct effluent limits?	N[23]	N[24]
• limits and monitoring requirements for all local limit pollutants?	N[25]	N[25]
☞ if no, is there documentation of the reasons for excluding specific pollutants?	N	N
• sampling location and frequency?	Y	Y
• sample type?	Y	Y
• legal authority cite?	Y	
• issuance and expiration date?	Y	

[21]Categorization, new source, combined wastestream formula, production based standards, monitoring frequency, comparison of local limits to categorical standards, etc.

[22]Calculation of production based standards only.

[23]It appears that the production-based categorical standards may not have been calculated correctly, and the local limits for copper and nickel are more stringent than the permit limits.

[24]The OCPSF standards were not applied as mass-based limits in the permit as required, and the local limits for cyanide and zinc are more stringent than the permit limits.

[25]Local limits for aluminum, beryllium, hexavalent chromium, silver, thallium, ammonia nitrogen, PCBs, phenolics, BOD, and TSS are included in the ordinance but are not included in the permits.

FILE REVIEW CHECKLIST	IU1	IU2
● IU reporting requirements:		
- self-monitoring reports?	Y[26]	
- notice of potential problems, incl. slugs?	[27]	
- resampling requirement?	Y	
- use of 136 methods?	[28]	
- report more frequent monitoring?	Y	
- notification of changed discharge?	Y[29]	
- record-keeping requirements:		
☞ maintain for 3 years?	Y	
☞ sample date?	Y[30]	
☞ sample location?	Y[30]	
☞ sample type?	Y[30]	
☞ sample time?	N	
☞ name of sampler(s)?	N	
☞ sample preservation?	N	
☞ analyses dates?	N	
☞ name(s) of analyst?	N	
☞ analytical methods?	Y[30]	
☞ analytical results?	Y[30]	
- signatory requirement?	Y[31]	
- certification statement?	Y[31]	

[26]Due January and July of each year (no specific date).

[27]Requires notice of slugs.

[28]All metals analysis must conform to Part 136

[29]Must report changes to the Town of Middletown.

[30]Requires that the self-monitoring reports include this information and that the reports be maintained for 3 years.

[31]References 40 CFR 403.12(l), and the correct certification statement is on the required self-monitoring form.

FILE REVIEW CHECKLIST	IU1	IU2
- compliance schedule?	N	N
☞ if yes, does it stay applicability of permit requirements?	N/A	N/A
- hazardous waste notification?	[32]	
- right of entry?	Y	
- penalty provisions?	[33]	
- nontransferability?	Y	
- revocation of permit?	N	
- representative sampling?	N	
3. Is the permit effective for 5 years or less?	Y	N
4. Were local limits and/or categorical standards properly applied?	N[23]	N[24]
5. If applicable, were production-based standards correctly applied?	N	N/A
6. If applicable, was the combined wastestream formula correctly applied?	N/A	N/A
7. If applicable, were TTO requirements or alternatives correctly applied?	N/A	N/A
8. In the inspector's opinion, is the sample frequency sufficient to determine compliance?	Y	N[34]
C. POTW Inspections of IUs		
1. How many POTW inspections were conducted and documented in the last 12 months?	1	1
2. Does the inspection report include:		
• inspector name?	Y	
• inspection date/time?	Y	
• name of IU official contacted?	Y	
• evaluation of manufacturing facilities?	Y	
• verification of production data if needed?	N[35]	

[32]Requires notification of the "Department", but this appears to refer to DE DNREC.

[33]References Middletown code for penalties, but doesn't cite the amount.

[34]Several violations appear to have occurred for metals and cyanide. Semiannual sampling frequency for these pollutants therefore appears to be inappropriate.

[35]There is a place on the inspection form for this information, but it is listed as N/A (this user is subject to production-based standards).

FILE REVIEW CHECKLIST	IU1	IU2
• identification of wastewater sources, flow and types[36] of discharge?	Y	
• evaluation of pretreatment facilities?	Y	
• evaluation of chemical storage areas?	Y	
• evaluation of need for spill/slug control plan at least every 2 years?	N[37]	
• evaluation of spill/slug control procedures?	N[37]	
• evaluation of general housekeeping?	Y	
• potential hazardous waste discharge?	Y	
• evaluation of self-monitoring equipment and techniques?	N[38]	
• evaluation of lab procedures?	N[39]	
• evaluation of monitoring records?	Y	
D. POTW Sampling of IUs		
1. How many sampling visits were conducted and documented in the last 12 months?	1[40]	1+1[40,41]
2. Do the sampling reports include:		
• all analytical results?	Y	
• name of sampling personnel?	N	
• sample date/time?	Y	
• sample type?	Y	
• sample location?	N	
• wastewater flow during sampling?	N	
• sample preservation?	ICE	
• chain of custody?	N	

[36]continuous, intermittent, batch, etc.

[37]Inspection report states that the spill plan is on-site, but it doesn't make any comments about the implementation and effectiveness of the plan. The report does indicate that general housekeeping is acceptable.

[38]Only notes who does it.

[39]Done by contract except pH. For pH the report only notes who does the analysis.

[40]Also did 2 additional samples for surcharge purposes.

[41]1 independent sample by the County and 1 sample collected by the County and sent to the user's lab.

FILE REVIEW CHECKLIST	IU1	IU2
• analytical methods used?	N	
• analysis date?	Y	
• name of analyst?	INIT	
3. Were all regulated parameters monitored?	Y	[42]
4. Were 40 CFR 136 analytical methods used?	U	U
E. IU Self-Monitoring and Reporting		
1. Has the IU submitted all required self-monitoring reports in the last 12 months?	Y	Y
2. Did the report include measured or estimated flow data?	Y	Y
3. Were all regulated parameters monitored at the required frequency?	Y	Y
4. Is there documentation that the IU notified the POTW within 24 hours of becoming aware of a violation?	N	N/A
5. Has the IU resampled and reported within 30 days after a violation?	N[43]	N/A[44]
6. Are reports signed and certified by a responsible corporate official or authorized representative?	U[45]	U[46]
7. If applicable, was the authorization made in writing?	N	N
F. Slug/Spill Control		
1. Have any slugs/spills been documented in the file?	N	Y
2. Did the POTW require development of a slug/spill control plan?	U	U
3. Has the IU developed a slug/spill control plan?	U[47]	Y
4. Does the slug/spill plan contain:		
• description of discharge practices?	U	N

[42]OCPSF parameters were analyzed by the user's lab rather than by the County or an independent lab.

[43]9/18/01 pH violation - next sample was 10/9/01, but wasn't reported until 1/25/02.

[44]But no resampling occurred when results were reported as non-detectable but with a detection level above the permit limit.

[45]Reports signed by Rick Thompson, Plant Manager.

[46]Reports signed by Richard T. Mayes, Technical Manager.

[47]Inspection report indicates yes, but the plan is not in the file.

FILE REVIEW CHECKLIST	IU1	IU2
• description of stored chemicals?	U	N
• procedures to prevent slugs/spills?	U	Y[48]
• procedures to notify POTW of slugs/spills?	U	N[48]
• follow-up practices to minimize damage from slugs/spills?	U	Y[48]
G. Enforcement		
1. Did the POTW respond to all IU violations in the last 12 months?	N	N
2. Was SNC status correctly reported on last AR?	N[49]	N[50]
3. Is the IU currently in SNC?	N	Y[51]
4. Is the IU under a formal enforcement action?	N	N
5. Did the POTW escalate action in accordance with the ERP?	N	N
H. Summary		
1. Is the file well organized and readily accessible?	Y	Y

[48]Plan indicates that the user will shut down the sump to the County, but doesn't specifically state that the County will be notified. There are letters in the file to the County asking for permission to discharge from the sump.

[49]The report of the resampling results for the pH violation that occurred on September 18, 2001 was more than 30 days late but the user was not listed in SNC for calendar year 2001.

[50]January - June '01; nickel 2 TRC violations in 3 samples, cyanide 2 TRC violations in 3 samples, selenium 1 TRC violation in 3 samples. July - December '01; nickel 1 TRC violation in 2 samples, cadmium 1 TRC violation in 2 samples, copper 1 TRC violation in 2 samples.

[51]For the July - December SNC evaluation period which was the latest period for which effluent monitoring data was available.

SECTION X FINDINGS, REQUIREMENTS, AND RECOMMENDATIONS

A. Legal Authority

1. Findings on POTW's legal authority. **The review of the County ordinance conducted in June 2002 found several deficiencies which must be corrected. A copy of the ordinance review is included in attachment 1. The County must also revise the variance language in the ordinance. In addition, although there are no significant users in Odessa or Townsend, there are no pretreatment ordinances for these municipalities in the file.**

2. To comply with its approved program and/or the General Pretreatment Regulations, the POTW is required to do the following:

- Revise the variance language in the ordinance to ensure that it does not allow for variances to federal standards or requirements or local limits beyond the maximum allowable headworks loading.

- Revise the County ordinance in accordance with the legal authority review in attachment 1.

- Submit copies of adopted pretreatment ordinances for Odessa and Townsend, or submit a statement indicating that only residential wastewater is received from these communities.

3. To improve its pretreatment program, it is recommended that the POTW do the following:

- None.

B. Application of Standards

1. Findings on POTW's application of standards. **The County's NPDES permit required that the new local limits be adopted by October 7, 2002 but this has not been done. This appears to be partly due to issues regarding the influent monitoring exceedances, the overall ordinance review, and the reevaluation of the Wilmington local limits which must be incorporated into the New Castle ordinance as well. The County's influent monitoring data for the past several years has shown exceedances of the maximum allowable headworks concentration for several pollutants (some of the "exceedances" were based on detection limit issues). The 2001 evaluation suggested that for all pollutants except cyanide, the current influent goals may be overly stringent, but for cyanide, the effluent goal was also exceeded. Since the County is no longer accepting wastewater from the Town of Middletown, the existing local limits evaluation may need to be redone. The County also appears to be applying the categorical standards incorrectly. OCPSF limits were included in the permit as concentrations rather than masses as required by the regulations, and the production-based limits in the file for Johnson Controls could not be duplicated based on the information found in the file. In addition, several of the permit limits for the two users were less stringent than the local limits in the County ordinance, although it is possible that a variance was granted since the County apparently does not document the granting of variances.**

2. To comply with its approved program and/or the General Pretreatment Regulations, the POTW is required to do the following:

- Adopt the revised local limits that were accepted on June 7, 2002 as required by the County's NPDES permit.

- Apply the more stringent of the categorical standards and the local limits in the permit.

- Document any variances granted to the users, including the reason and justification for the variance and the total loading allocated to all industrial users relative to the maximum allowable industrial loading calculated in the most recently approved local limits submission.

- Apply the OCPSF categorical standards as mass-based limits in the permits. Mass limits for cyanide, lead, and zinc must be based only on the flows of the respective cyanide-bearing and metals-bearing wastestreams.

- Reevaluate the categorical standards assigned to any users subject to production-based standards.

3. To improve its pretreatment program, it is recommended that the POTW do the following:

- Reevaluate the local limits because the flow from the Town of Middletown is no longer part of the system.

- Continue to monitor the influent, effluent, and sludge to determine the impact of the elimination of the flow from Middletown, and whether the influent exceedances that have occurred over the last several years are still continuing.

- Evaluate whether there are any sources of cyanide in the system and whether there continues to be an exceedance of the effluent goal for cyanide.

- Evaluate whether lower detection levels on the influent and effluent monitoring are possible to better assess the pollutant levels.

C. Control Mechanism

1. Findings on the POTW's control mechanism. **Several revisions to the County's permit form are needed as shown in attachment 4. The MacDermid permit was issued for a period of 5 years and 1 day.**

2. To comply with its approved program and/or the General Pretreatment Regulations, the POTW is required to do the following:

- Revise the permits in accordance with the permit review in attachment 4. Revisions using the words "must" or "required" are required revisions.

- Permits must be issued with an effective length of 5 years or less.

3. To improve its pretreatment program, it is recommended that the POTW do the following:

- Revise the permits in accordance with the permit review in attachment 4. Revisions using the words "should" or "recommended" are recommended revisions.

- Document all decisions made during the permitting process. This would include information such as user categorization and new source determination, use of the combined wastestream formula (including when it is not needed), calculation of production-based or mass-based standards, comparison of local limits and categorical standards, and selection of monitoring frequency. Guidance on documentation of permit decisions is included in attachment 5.

- Reevaluate the self-monitoring frequencies in the user permits and require more frequent monitoring if the user has had effluent violations.

- Include all local limits in the permit, including those pollutants for which no monitoring is determined to be necessary.

D. Compliance Monitoring

1. Findings on POTW's compliance monitoring program. **While the County's sampling and inspection program generally seems to be effective, there are a number of adjustments that need to be made.**
- It appears that when the County takes a sample from MacDermid for OCPSF pollutants, it uses the user's lab for the analysis rather than an independent lab. There was no indication that the County had documented the flow during its sampling of users with mass-based limits. In addition, there were some documentation issues with the County's sampling.
- In regard to self-monitoring, it appeared that Johnson Controls was conducting monthly pH monitoring rather than the continuous monitoring required by the permit, and the detection levels for a number of OCPSF pollutants on one of the MacDermid self-monitoring reports were not low enough to evaluate compliance with the OCPSF limits. In addition, there was no documentation in the files that the users had notified the County within 14-hours of becoming aware of a self-monitoring violation, nor were repeat samples submitted within 30 days of discovery of self-monitoring violations.
- The County's inspection report for Johnson Controls did not note the user's production rate even though it is subject to production-based standards, and there was no indication that the County had reviewed the implementation and effectiveness of the user's spill control plan.
- While the Johnson Controls file indicated that the user had developed a spill plan, a copy was not in the file. For MacDermid, the spill plan was not as inclusive as is required for a slug control plan.
- It was unclear whether the people signing the user self-monitoring reports are authorized representatives under 40 CFR 403.12(l). The Johnson Controls reports were signed by the plant manager, but the plant manager would only be an authorized representative if the plant is large enough. The MacDermid reports were signed by the Technical Manager, but this position does not appear to be an authorized representative. No written authorizations for these positions were found in the files.

2. To comply with its approved program and/or the General Pretreatment Regulations, the POTW is required to do the following:

- All samples taken by the County must be analyzed in the County's lab or an independent lab, and cannot be given to the user's lab for analysis.

- Determine the flow during sampling for all users subject to mass-based limits.

- Sampling documentation must include the name of the sampler, the specific sampling location, and the analytical methods used.

- Ensure that users resample and report within 30 days of discovery of a violation.

- Document any violation notifications from users.

- Ensure that users monitor pH in accordance with the requirements of their permits.

- Ensure that sampling and analysis is repeated if the detection levels reported by the lab are not low enough to determine compliance.

- Verify and document production records during inspections for users subject to production-based standards during the inspections.

- Evaluate the implementation and effectiveness of user spill/slug control plans during the inspections.

- When a slug control plan is required, it must include a description of the user's discharge practices, a description of the stored chemicals, and procedures to notify the County in the event of a slug discharge. A sample slug control plan checklist is included in attachment 6.

- Ensure that copies of user spill/slug control plans are maintained in the County's files.

- Review the signatory authorities for the users' self-monitoring reports and require appropriate signatures. Signatory requirements from the General Pretreatment Regulations are included in attachment 7.

3. To improve its pretreatment program, it is recommended that the POTW do the following:

- Where the County uses grab samples, collect multiple grab samples to obtain a more representative sample.

- Require batch dischargers to notify the County prior to discharge so that it can conduct unannounced sampling if it chooses to.

E. Enforcement

1. Findings on the POTW's enforcement. **Based on the review of the users' files, it appears that both users had SNC violations during calendar year 2001 and that neither of the SNCs were identified by the County, nor were any enforcement actions taken in response to the violations. In addition, although self-monitoring was not required for BOD in the MacDermid permit, the surcharge monitoring done by the County indicated that this user was consistently in violation of the BOD limit in the County's ordinance which was incorporated by reference in the permit.**

2. To comply with its approved program and/or the General Pretreatment Regulations, the POTW is required to do the following:

- Enforce in accordance with the County's approved ERP.

- Reevaluate SNC for calendar years 2001 and 2002, including all monitoring results and reporting requirements.

- If the reevaluation shows SNC violations publish list of users in SNC.

- Develop a mechanism for identifying all violations of discharge limits and reporting requirements.

3. To improve its pretreatment program, it is recommended that the POTW do the following:

- Obtain a computer system which will help with compliance evaluations to ensure identification of all violations.

F. Data Management and Public Participation

1. Findings on data management and public participation. **Although there were some documentation issues identified above, the County's data management and public participation appears to be adequate.**

2. To comply with its approved program and/or the General Pretreatment Regulations, the POTW is required to do the following:

- None.

3. To improve its pretreatment program, it is recommended that the POTW do the following:

- Subscribe to EPA's listserve for notification of Federal Register publications as they occur. Dircetions for subscribing are included in attachment 8.

G. Resources

1. Findings on the POTW's resources. **No evidence was found to suggest that any of the program deficiencies were caused by a lack of resources, although a computer system for data management would have eliminated a few of the deficiencies.**

2. To comply with its approved program and/or the General Pretreatment Regulations, the POTW is required to do the following:

- None.

3. To improve its pretreatment program, it is recommended that the POTW do the following:

- None.

Attachments

1 - Legal Authority Review

2 - Pretreatment Audit Measures Charts

3 - File Review Worksheets

4 - Permit Form Review

5 - Documentation of Permit Decisions

6 - Sample Slug Control Plan Review Checklist

7 - Signatory Requirements for Industrial User Reports

8 - EPA "Listserve" Information

9 - Approved Local Limits

10 - Industrial Inspection Report

11 - Audit Action Items

ATTACHMENT 1

Legal Authority Review

COMMENTS ON THE LEGAL AUTHORITY OF NEW CASTLE COUNTY TO IMPLEMENT A LOCAL PRETREATMENT PROGRAM

A legal authority review has been conducted for the New Castle County (County) draft of Ordinance No. 01- "To Amend Chapter 38 of the New Castle County Code Relating to the Regulation of Non-Domestic Wastewater Dischargers" submitted April 30, 2002 (hereinafter referred to as "ordinance"). The intent of the review was to determine whether, after adoption, the County ordinance includes adequate authority to implement and enforce a pretreatment program in compliance with the General Pretreatment Regulations set forth in 40 Code of Federal Regulations (CFR) Part 403. In addition, the review looked for areas where the ordinance might be strengthened to further improve the County pretreatment program.

This legal authority review was conducted only for the County draft ordinance. The review did not include ordinances of municipalities which send their wastewater to the County's treatment plant. These municipal ordinances are a necessary part of the County's pretreatment program and the County must ensure that these ordinances are updated as well.

Based on this legal authority review, the County will need to revise its draft ordinance before it will be acceptable for implementation of the pretreatment program. After adoption by the County and the municipalities served by the County's treatment plant, the revisions must be submitted to EPA for approval as a pretreatment program modification in accordance with 40 CFR 403.18. While EPA cannot approve the revisions until the County's ordinance and other municipal ordinances are enacted, it may be appropriate to submit a revised draft for review prior to enactment. If a revised draft is submitted, highlighting the changes from this draft will help speed the review process.

Most of the comments below correspond to the attached legal authority checklist. Items on the checklist marked "No Revision" comply with minimum federal requirements. Items checked "Revision Recommended" provide acceptable legal authority which may be strengthened through revisions. Items identified as "Revision Required" either are missing from the ordinance or are inconsistent with minimum legal authority requirements for approved pretreatment programs.

A. Definitions

Although the federal pretreatment regulations do not require local sewer use ordinances to include a definitions section, definitions clarify and strengthen substantive pretreatment program provisions. To the extent that the County chooses to use terms which are defined in the General Pretreatment Regulations, the County's definitions may not be less stringent or inclusive than EPA's definitions. Where key terms must be construed differently than their common meaning, definitions are also required.

(3) **New Source (Revision Required)** - The County's definition of "New Source is essentially correct except that it cites Section 306 of the Clean Water Act. The correct definition cites Section 307(c) of the Clean Water Act.

(8) **Significant Noncompliance (Revision Recommended)** - The County's definition of this term uses the term "Control Authority", but does not define what this means. It is recommended that the County use the term "County" in place of "Control Authority", or define "Control Authority" in the ordinance.

(10) **Other Definitions**

(a) Authorized Representative (Revision Required) - The County's definition of "Authorized Representative" refers to 40 CFR 403.12(6). The correct reference is 40 CFR 403.12(l). In addition, it is recommended that the definition be written out in the ordinance rather than simply providing a reference to the EPA regulations. The definition from EPA's Model Ordinance is enclosed.

(b) Composite Sample (Revision Recommended) - While it is acceptable as written, the County's definition of "Composite Sample" may be too specific and inflexible. For example, it does not allow that a composite be taken over a period of time of less than six hours, and that if a series of grab samples are used a grab must be taken each hour and the grab proportioned according to flow. While it may be appropriate to include a specific definition such as this in an individual permit to ensure that the user collects its samples appropriately, the County may want to be somewhat less specific in the ordinance to allow for different circumstances at the users. The definition of composite sample from EPA's sampling and inspection guidance is enclosed.

(c) **NPDES (Revision Required)** - The County's definition of "NPDES" references 40 CFR Chapter 1, Part 122. The correct reference is 40 CFR Chapter I, Part 122.

B. Prohibited Discharges

(1) General Prohibitions

(a) Pass Through (Revision Recommended) - Section 38-267(7)(d) of the County's draft ordinance prohibits discharges which pass to the receiving stream and cause a violation of the state or federal regulations. While this is probably sufficient, the definition of "pass through" in EPA's regulations cites discharges which cause a violation of the NPDES permit. It is therefore recommended that "or NPDES permit" be added to the end of this section.

(2) Specific Prohibitions

(c) Solid or Viscous/Obstruction (Revision Recommended) - Section 30-267(7)(a) of the draft ordinance prohibits substances which cause obstruction in the sewer system. Section 38-267(8) of the draft ordinance prohibits solid or viscous substances, including but not limited to those materials listed. Together these two provisions are sufficient to meet the requirement that the ordinance prohibit solid or viscous substances which cause obstruction. However, the ordinance prohibition on solid or viscous substances in Section 38-267(8) is very broad since many substances can be "solid or viscous". It may be more appropriate to prohibit "solid or viscous substances which cause obstruction to the flow in the sewer system" to better define this prohibition.

(e) Heat (Revision Required) - Section 38-267(1) of the draft ordinance prohibits discharges that cause the influent of the treatment plant to exceed 104°F as required by 40 CFR 403.5(b)(5). However, 403.5(b)(5) also generally prohibits heat in amounts that will inhibit biological activity in the POTW, even where the discharge does not cause the influent of the treatment plant to exceed 104°F. Therefore, this additional language must be added to the County's ordinance.

(f) Petroleum/Nonbiodegradeable Cutting/Mineral Oils (Revision Required) - Section 38-267(2) of the draft ordinance prohibits discharges of oil in excess of 100 mg/l, and allows the County to establish lower limits if necessary to prevent interference or pass through. However, 40 CFR 403.5(b)(6) prohibits oil in any amounts that cause pass through or

interference. Since the County's ordinance language does not specifically prohibit discharges below 100 mg/l which cause pass through or interference, it must be revised to reflect the EPA regulatory requirement.

(g) Toxic Gases/Vapors/Fumes (Revision Required) - Section 38-267(5) of the County's draft ordinance prohibits pollutants which cause toxic gases "in a facility that may cause acute worker health and safety problems." It appears that the word "facility" should be "quantity."

(3) Enforceable Local Limits (Revision Recommended) - Section 38.02.703 of the draft ordinance lists the County's local limits. However, this section does not specifically indicate whether the limits are instantaneous maximum limits, daily maximum limits, or some kind of average limits. Generally when the type of limit is not specified, it is assumed to be an instantaneous maximum limit. In any case, it is recommended that the County specify which type of limit the values represent. In addition, this section is numbered differently than the rest of the ordinance, which may be confusing. It is recommended that this section be numbered as 38-268.

C. Control Discharges to POTW System

(2) Individual Control Mechanism to Ensure Compliance

(a) Statement of Duration (Revision Recommended) - Section 38-269(f) of the draft ordinance indicates that permits will be issued for a specified period of time, and Section 38-269(d)(11) of the draft ordinance allows the County to put conditions as necessary into the permits. However, 40 CFR 403.8(f)(1)(ii)(A) requires that permits include a statement of duration (i.e., issuance and expiration dates). While the draft ordinance gives the County the ability to include the statement of duration, since it is specifically required in the permits, it is recommended that Section 38-269(d) specifically authorize this provision.

(b) Statement of Nontransferability (Revision Recommended) - Section 38-269(g) of the draft ordinance indicates that permits may not be transferred to new owners, and Section 38-269(d)(11) of the draft ordinance allows the County to put conditions as necessary into the permits. However, 40 CFR 403.8(f)(1)(ii)(B) requires that permits include a statement of nontransferability. While the draft ordinance gives the County the ability to include the statement of nontransferability, since it is specifically

required in the permits, it is recommended that Section 38-269(d) specifically authorize this provision.

(3) **Require Development of Slug/Spill Plan (Revision Recommended)** Section 38-270(c) of the draft ordinance authorizes the County to require development of an accidental discharge/slug control plan for significant industrial users. While EPA's regulations only require that the County periodically review the need for a slug control plan at significant users, it is recommended that the County's ordinance allow it to require development of these plans from any industrial user, and not only significant users.

D. Require Sampling and Reporting

(2) Requirement to Conduct Representative Sampling (Revision Required) - Section 38-271(4) of the draft ordinance states that sampling "shall usually be" representative, and this section appears to be intended to dictate requirements for County sampling. No other provision in the draft ordinance was found which addresses the requirement for user sampling to be representative of normal discharges in accordance with 40 CFR 403.12(g)(3). If this section was intended to dictate County sampling requirements, a provision must be added to the County ordinance which requires that all sampling conducted by the users be representative of normal discharges. If this provision is intended to apply to users, it must be clarified and revised to state that all sampling must be representative of normal discharges (not only "usually").

(3) Reporting Requirements

(b) Compliance Schedule Monitoring Report (Revision Recommended) - Section 38-269(e)(3) of the County's draft ordinance requires submission of compliance schedule progress reports "stated in subsections 38-269(b)(10), (d)(9), and this subsection." However, since those sections of the ordinance do not include actual schedules, more appropriate wording may be "submitted or issued in accordance with subsections..."

(d) Periodic Compliance Report (Revision Required) - Section 38-269(d)(6) of the County's draft ordinance authorizes the County to require monitoring and reporting through the permits. However, 40 CFR 403.12(e) and (h) require categorical and significant noncategorical users to submit at least semiannual monitoring reports. The County's ordinance must be revised to require at least semiannual reports independent of whether the County can require reporting through the permits. It is

recommended that a new paragraph be added which requires all significant users to submit semiannual reports which include sampling and analytical results for all regulated pollutants unless required more frequently through the user's permit.

(e) Notice of Potential Problems (Revision Required) - Section 38-273(a) of the County's draft ordinance requires users to notify the County in the even of an accidental discharge. However, 40 CFR 403.12(f) requires that users report any discharges which exceed the prohibitions in 403.5(b) and any other discharges which could cause problems to the POTW. Since this language is broader than the County's requirement to report accidental discharges, the County's ordinance must be revised.

(g) Notice of Changed Discharge (Revision Required) - Section 38-269(d)(10) of the County's draft ordinance authorizes the County to include a provision in user permits which requires the user to notify the County of changes at the facility. However, the General Pretreatment Regulations require that all industrial users, independent of whether or not they have been issued a permit, notify the POTW of changes in the discharge. The County must therefore include a provision in the ordinance which requires this notification independent of the permit requirement.

(k) Record Keeping Requirement (Revision Required) - Section 38-269(d)(8) of the County's draft ordinance authorizes the County to include a provision in user permits which requires the user to maintain records relating to wastewater discharges at the facility. However, the General Pretreatment Regulations require that all industrial users, independent of whether or not they have been issued a permit, maintain records, and specifies what those records must include. The County must therefore include a provision in the ordinance which requires that records be maintained independent of the permit requirements. The ordinance must also specify what records must be maintained.

E. Inspection and Monitoring Procedures

(2) Right to Inspect for Compliance (Revision Recommended) - The last sentence of Section 38-271(1) states that the County "shall have no authority to inquire into any manufacturing process beyond that point having direct bearing on the kind and source of discharge..." However, in order to verify that sections of the facility have no bearing on the discharge to the County's system, the County must review those areas of the facility, and

periodically revisit them to ensure that no changes have occurred. Therefore, the last sentence of this section should be deleted from the ordinance.

(5) Right to Inspect and Copy Records (Revision Required) - Section 38-269(d)(8) of the County's draft ordinance authorizes the County to include a provision in user permits which allows it to inspect and copy records relating to wastewater discharges at the facility. However, the County must have access to records at all industrial users, independent of whether or not they have been issued a permit. The County must therefore include a provision in the ordinance which allows it to inspect and copy records independent of the permit requirements.

F. Remedies for Noncompliance

(1) Nonemergency Relief

(c) Administrative Penalties (Revision Recommended) - Section 38-276(e) of the County draft ordinance authorizes the County to issue fines when violations occur. However, the language in this section states that the user "shall be fined." This could be interpreted to mean that each user must be fined every time it has a violation. While this would be acceptable, most ordinances state that the POTW may impose a fine for a violation rather than require a fine. It is recommended that the County ordinance allow the fine, but not require it.

G. Public Participation

(1) Publish List of Users in SNC (Revision Recommended) - Section 30-274 of the draft County ordinance requires the General Manager to publish the list of user that were in SNC "during the twelve (12) previous months." Since this is done on an annual basis, it may be more appropriate to publish the list from "the previous calendar year," to clearly indicate the period to which the publication applies and that it is an annual publication rather than a periodic publication that occurs more frequently.

(2) Access to Data

(a) Government (Revision Required) - Section 38-275 of the draft County ordinance states that the County will release information to a government agency without restriction unless the user demonstrates that the information is confidential. However, the County may not withhold information from EPA and the State, and the ordinance must reflect this.

H. Optional Provisions

(4) **Special Agreements/Variances**

(a) Prohibit Changes to Federal Standards and Requirements (Revision Required) - Section 38.02.703(b) of the draft ordinance allows the County to make special agreements to accept waste in excess of the local limits. Since it is limited in scope to the local limits, it does not address federal standards and requirements. However, Section 38-269(h) allows variances to requirements of "this section." Since "this section" includes several requirements which are included in the General Pretreatment Regulations, Section 38-269(h) must be revised to specifically prohibit variances to those federal requirements. Including a phrase such as "and pretreatment requirements found in the General Pretreatment Regulations, 40 CFR 403" after "National Prohibitive Discharge Standards" should resolve this issue.

(b) Establish Cap Based on MAIL (Revision Required) - Section 38.02.703(b) of the draft ordinance allows the County to accept wastes in excess of the local limits, but does not limit the extent to which the County may increase the local standard for a given user or set of users. In establishing the local limits, the County calculates the maximum allowable headworks loading (MAHL) which represents the maximum loading of various pollutants that the County can safely accept without causing pass through and interference. From the MAHL, the County subtracts the loading of each pollutant that is received from unregulated sources, and the remainder is the maximum allowable industrial loading (MAIL). Since the MAIL is the calculated loading that the County can safely accept from industrial users without causing pass through or interference, the County may not allocate more than the MAIL to the industrial users. If a variance or special agreement provision is to be included in the ordinance which allows discharges in excess of the local limit, the County must include a cap on the additional loading that may be allocated to the users. Language such as, "In no can shall a special agreement allow the total loading allocated to all regulated industrial users to exceed the maximum allowable industrial loading calculated during the most recent local limits evaluation." As an alternative, the County could list the actual calculated MAILs for each pollutant in the ordinance.

(c) Granted in Writing (Revision Required) - Both Section 38.02.703(b) and Section 38-269(h) of the draft ordinance allow for special agreements and/or variances, but do not require that

approval of the agreement/variance be in writing. In order to document that the agreement/variance has actually been granted through mechanisms established in the ordinance, EPA is requiring that the ordinance require that the agreement/variance be granted in writing. The granting of the agreement/variance should also be documented in the user's permit fact sheet. If any agreements/variances are granted, EPA will also require that the County maintain a spreadsheet, or similar mechanism, which shows the loading allocated to each user, the total loading allocated to all users, and the MAIL to demonstrate that the MAIL has not been exceeded.

(5) Pretreatment (Revision Recommended) - Section 38-270(b) of the draft ordinance states that when preliminary treatment facilities are required, they must be maintained. It is recommended that the word "preliminary" be deleted and that the County require that all treatment facilities be maintained.

(6) Disputed Constituent Concentration (Revision Recommended) - Section 38-271(5) of the draft ordinance sets up a process for disputed sample results, and indicates that the process *may* be followed. It is recommended that the deadline for submission of a request for review of the disputed results be *required* to be submitted within a definite time frame to ensure that a user cannot dispute sample results because enforcement has begun. In addition, Section 38-271(5)(c) states that if resampling occurs as a result of the disputed sample, the resampling results will not replace the disputed results for purposes of determining compliance. However, in the event that the original results were found to be invalid for some reason, it may be appropriate to discard them.

(7) Typographical Errors (Revision Recommended) - Two minor typographical errors were found during the review of the draft ordinance. Copies of these pages with the error noted are enclosed.

DATE: June 7, 2002

MUNICIPALITY: New Castle County

LEGAL AUTHORITY CHECKLIST

This checklist sets out the minimum requirements necessary for a POTW to comply with the federal pretreatment regulations (40 CFR §403). The pretreatment ordinance reviewed must be no less stringent than the listed provisions. The checklist also includes several optional provisions (H(1-4)). The optional provisions need not be included in the ordinance, but if they are, they must be no less stringent than the regulatory provision. The basic definitions should be provided in order that the remainder of the ordinance will make sense; even though they are not required by 40 CFR §403. The requirements which a POTW must meet are set out in 40 CFR 403.8(f). This checklist incorporates other sections which are necessary to comply with 403.8(f). All cites in brackets, [], refer to Title 40.

In addition, each section of the checklist references the June 1992 MODEL PRETREATMENT ORDINANCE (MODEL). The MODEL was developed by EPA as a guide for POTW's in developing their pretreatment programs. The references to the MODEL are included to provide the reviewer/municipality with an example of an adequate provision which meets or exceeds the federal regulations. A pretreatment ordinance does not have to conform to the MODEL.

NONE = No Revision Necessary **REC** = Recommended **REQ** = Required

	REVISION NONE	REC	REQ	ORDIN. SECTION
A. Definitions [40 [illegible]				
(1) Industrial User or User MODEL §1.4(GG)	X			38-266
(2) Interference, MODEL §1.4(L)	X			38-266
(3) New Source, MODEL §1.4(N)			X	38-266
(4) Pass Through, MODEL §1.4(P)	X			38-266
(5) Pretreatment Requirement MODEL §1.4(U)	X			38-266
(6) Pretreatment Standard MODEL §1.4(V)	X			38-266
(7) Significant Industrial User MODEL §1.4(AA)	X			38-266

	REVISION NONE	REC	REQ	ORDIN. SECTION
(8) Significant Noncompliance [403.8(f)(2)(vii)], MODEL §9		X		38-266
(9) Slug Load or Slug [403.8(f)(2)(v)&403.12(f)] MODEL §1.4(BB)	X			38-266
(10) Other Needed Definitions				
(a) Authorized Representative			X	38-266
(b) Composite Sample		X		38-266
(c) NPDES			X	38-266
B. Prohibited Discharges				
(1) General Prohibitions [403.5(a)] MODEL §2.1(A)				
(a) Interference	X			38-267(7)(b)
(b) Pass Through		X		38-267(7)(d)
(2) Specific Prohibitions [403.5(b)]				
(a) Fire/Explosive Hazard MODEL §2.1(B)(1)	X			38-267(4)
(b) pH/Corrosion MODEL §2.1(B)(2)	X			38-267(10)
(c) Solid or Viscous/Obstruction MODEL §2.1(B)(3)		X		38-267(7)(a) 38-267(8)
(d) Flow Rate/Concentration MODEL §2.1(B)(4)	X			38-267(7)(c)
(e) Heat, MODEL §2.1(B)(5)			X	38-267(1)
(f) Petroleum/Nonbiodegradable Cutting/Mineral Oils MODEL §2.1(B)(6)			X	38-267(2)
(g) Toxic Gases/Vapors/Fumes MODEL §2.1(B)(7)			X	38-267(5)
(h) Trucked/Hauled Wastes MODEL §2.1(B)(8)	X			38-267(6)
(3) Enforceable Local Limits [403.8(f)(4) & 403.5(c)&(d)] MODEL §2.4		X		38.02.703(a)
(4) National Categorical Standards [403.8(f)(1)(ii) & 403.6] MODEL §2.2	X			38.02.703(d)

	REVISION NONE	REC	REQ	ORDIN. SECTION
(5) Prohibition Against Dilution as Treatment [403.6(d)], MODEL §2.6	X			38.02.703(f)
C. Control Discharges to POTW System				
(1) Deny/Condition New or Increased Contributions [403.8(f)(1)(i)] MODEL §§4.7, 5.2	X			38-269(d)
(2) Individual Control Mechanisms to Ensure Compliance [403.8(f)(1)(iii)], MODEL §§4,5				
(a) Statement of Duration		X		38-269(d)(11) 38-269(f)
(b) Statement of Nontransferabil.		X		38-269(d)(11) 38-269(g)
(c) Effluent Limits	X			38-269(d)(2) 38-269(d)(5)
(d) Self-Monitoring & Reports	X			38-269(d)(6)
(e) Applicable Civil & Criminal Penalties	X			38-269(d)(7)
(3) Require Development of Slug/Spill Plan [403.8(f)(2)(v)], MODEL §3.3		X		38-270(c)
(4) Develop Compliance Schedule for Installation of Technology [403.8(f)(1)(iv)] MODEL §§5.2(B)(2), 10.4	X			38-269(d)(9) 38-276(d)
D. Require Sampling and Reporting				
(1) Use of EPA Approved Procedures [40 CFR 136], MODEL §6.10	X			38-271(3)
(2) Requirement to Conduct Representative Sampling [403.12(g)(3)], MODEL §6.4(b)			X	38-271(4)
(3) Reporting Requirements				
(a) Baseline Monitoring Report and/or Permit Application [403.12(b)], MODEL §§4.5,6.1				
(i) Identifying Information	X			38-269(a) 38-269(b)(1)
(ii) Permits	X			38-269(a) 38-269(b)(12)

	REVISION NONE	REC	REQ	ORDIN. SECTION
(iii) Description of Oper.'s	X			38-269(a) 38-269(b)(7) 38-269(b)(8)
(iv) Flow Measurement	X			38-269(a) 38-269(b)(2)
(v) Msrmnt. of Pollutants	X			38-269(a) 38-269(b)(3) 38-269(b)(14)
(vi) Certification	X			38-269(a) 38-269(b)(9)
(vii) Compliance Schedule	X			38-269(a) 38-269(b)(10)
(b) Compliance Schedule Monitoring Report [403.12(c)], MODEL §6.2		X		38-269(e)(3)
(c) Report on Compliance with Categorical Deadline [403.12(d)], MODEL §6.3	X			38-269(e)(3)
(i) Appropriate O&M/ Pretreatment Certificat.	X			38-269(e)(3)
(d) Periodic Compliance Report MODEL §6.4				
(i) From Categorical Users [403.12(e)]			X	38-269(d)(6)
(ii) From Significant Noncat. Users [403.12(h)]			X	38-269(d)(6)
(e) Notice of Potential Problems [403.12(f)], MODEL §6.6			X	38-273(a)
(f) Notice of Violation/ Resampling Requirement [403.12(g)(2)], MODEL §6.8	X			38-271(6)
(g) Notice of Changed Discharge [403.12(j)], MODEL §6.5			X	38-269(d)(10)
(h) Notification of Discharge of Hazardous Wastes [403.12(p)] MODEL §6.9	X			38-269(b)(13) 38-269(e)(2)
(i) Submission of All Monitoring Data [403.12(g)(5)] MODEL §6.4(c)	X			38-269(e)(4)

	REVISION NONE	REC	REQ	ORDIN. SECTION
(j) Data Accuracy Certification/ Authorized Signatory [403.6(a)(2)(ii) & 403.12(l)] MODEL §4.6	X			38-269(e)(1)
(k) Record Keeping Requirement [403.12(o)], MODEL §6.13			X	38-269(d)(8)
E. Inspection and Monitoring Procedures [403.8(f)(1)(vi)], MODEL §7.1				
(1) Right to Enter at Reasonable Times	X			38-271(1)
(2) Right to Inspect Generally for Compliance		X		38-271(1)
(3) Right to Take Independent Samples	X			38-271(1)
(4) Right to Require Installation of Monitoring Equipment	X			38-271(2)
(5) Right to Inspect and Copy Records			X	38-269(d)(8)
F. Remedies for Noncompliance (Enforcement)				
(1) Nonemergency Response				
(a) Injunctive Relief, MODEL §11.1	X			38-277(a)
(b) Civil/Criminal Penalties MODEL §§11.2, 11.3	X			38-277(b)(1)
(i) Use of Act 9				N/A
(ii) Penalty Appeals	X			38-279
(c) Administrative Penalties MODEL §10.6		X		38-276(e)
(2) Emergency Response - Immediately Halt Actual/Threatened Discharge MODEL §§10.7, 10.8	X			38-276(f)
G. Public Participation				
(1) Publish List of Industrial Users in Significant Noncompliance [403.8(f)(2)(vii)], MODEL §9		X		38-274
(2) Access to Data [403.8(f)(1)(vii) & 403.14], MODEL §8				
(a) Government			X	38-275
(b) Public	X			38-275

	REVISION NONE	REC	REQ	ORDIN. SE
H. Optional Provisions:				
(1) Net/Gross Calculation [403.15] MODEL §2.2(D)	X			N/A
(2) Upset [403.16], MODEL §13.1	X			N/A
(3) Bypass [403.17], MODEL §13.3	X			N/A
(4) Special Agreements/Variances				
(a) Prohibit Changes to Federal Standards and Requirements			X	38.02.703(b) 38-269(h)
(b) Establish Cap Based on MAIL			X	38.02.703(b)
(c) Granted in Writing			X	38.02.703(b) 38-269(h)
(5) Pretreatment		X		38-270(b)
(6) Disputed Constituent Concentration		X		38-271(5)
(7) Typographical Errors		X		See attachments

[Note: Each of the terms and phrases defined below are used at least once in the ordinance. When the municipality adopts its final version of the ordinance, it should delete from this Section all terms not used.]

A. Act or "the Act." The Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. § 1251 *et seq.*

B. Approval Authority. ***[Note: Designate the State as the Approval Authority if the State has an EPA-approved pretreatment program. Alternatively, designate the appropriate Regional Administrator of EPA as the Approval Authority in a nonapproved State.]***

C. Authorized Representative of the User.

(1) If the user is a corporation:

(a) The president, secretary, treasurer, or a vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or

(b) The manager of one or more manufacturing, production, or operation facilities employing more than two hundred fifty (250) persons or having gross annual sales or expenditures exceeding twenty-five (25) million dollars (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) If the user is a partnership or sole proprietorship: a general partner or proprietor, respectively.

(3) If the user is a Federal, State, or local governmental facility: a director or highest official appointed or designated to oversee the operation and performance of the activities of the government facility, or their designee.

(4) The individuals described in paragraphs 1 through 3, above, may designate another authorized representative if the authorization is in writing, the authorization specifies the individual or position responsible for the overall operation of the facility from which the discharge originates or having overall responsibility for environmental matters for the company, and the written authorization is submitted to **[the City]**.

D. Biochemical Oxygen Demand or BOD. The quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedures for five (5) days at 20° centigrade, usually expressed as a concentration (e.g., mg/l).

19) Chemical Treatment Process

A waste treatment process which involves the addition of chemicals to achieve a desired level of effluent quality.

20) Chronic Effects

When the effect of a single or repeated exposure(s) to a pollutant causes health effects over a long period of time in humans or other organisms this is said to be a chronic condition (compare to acute above).

21) Code of Federal Regulations (CFR)

A publication of the United States government which contains all of the finalized federal regulations. Federal environmental regulations are found in volume 40 of the CFR, and the General Pretreatment Regulations are found at 40 CFR Part 403.

22) Combined Wastestream Formula (CWF) [40 CFR 403.6(e)]

The combined wastestream formula is a means of deriving alternative categorical discharge limits in situations where process effluent is mixed with waste waters other than those generated by the regulated process prior to treatment.

23) Composite (Proportional) Samples

A composite sample is a collection of individual grab samples obtained at regular intervals, either based on time intervals or flow intervals (e.g., every two hours during a 24-hour time span or every 1000 gallons of process wastewater produced). Each individual grab sample is either combined with the others or analyzed individually and the results averaged. In time composite sampling the samples are collected after equal time intervals and combined in proportion to the rate of flow when the sample was collected. Flow composite sampling can be produced in one of two ways. The first method of obtaining a flow composite sample is to collect equal volume individual grab samples after a specific volume of flow passes the sampling point. The second manner of obtaining flow composite sample is to vary the volume of the aliquot collected in proportion to the amount of flow that passed over the time interval which the sample represents. Composite samples are designed to be representative of the effluent conditions by reflecting the average conditions during the entire sampling period (compare grab sample).

24) Confined Space

A space which, by design, has limited openings for entry and exit, unfavorable natural ventilation which could contain or produce dangerous air contaminants (or create an atmosphere of oxygen deprivation), and which is not intended for continuous employee occupation. A permit may be required under OSHA to enter a confined space.

25) Conservative Pollutant

A pollutant found in wastewater that is not metabolized while passing through the treatment processes in a conventional wastewater treatment plant. Therefore, a mass balance can be constructed to account for the distribution of the conservative pollutant . For example, a conservative pollutant may be removed by the treatment process and retained in the plant's sludge or it may leave the plant in the effluent. Although the pollutant may be chemically changed in the process, it can still be detected. Heavy metals such as cadmium and lead are conservative pollutants.

26) Control Authority [403.12(a)]

The Control Authority is the jurisdictional entity which oversees the implementation of the National Pretreatment Program at the local level. Usually, the Control Authority is the POTW with an approved

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[PCB	[0.0001] ND	-
Phenolics	10.0	10.00
BOD	350	350
Total Suspended Solids	500	500
[TKN	[-] 15	
[Phosphorus	[-] 45	

(b) *Additional limitations; acceptance of excess concentrations; special agreements.* Not withstanding the limitations set forth in subsection (a) of this section, the General Manager may impose additional limitations on mass loading of BOD and other constituents. However, the General Manager may accept the discharge in wastewater of constituents in excess of such concentrations provided that the General Manager determines that such increased concentrations are compatible with the wastewater treatment process. Nothing in this article shall be construed as preventing any special agreement or arrangement between the General Manager and any person whereby an industrial waste of unusual strength or character may be accepted by the General Manager for treatment, subject to the requirements of the National Pretreatment Standards. For such waste, the General Manager may require the user to provide any additional documentation or to conduct any special studies, at the user's expense, as deemed necessary to demonstrate that such waste complies with the limitations specified under section 38-267 and this section. Such waivers shall not be applicable to National Pretreatment Standards. Also, in no case will a special agreement waive compliance with a pretreatment standard or requirement, without prior written approval from EPA.

(c) *Surcharge fee.* The discharge of constituents in excess of the concentration limits set forth in subsection (a) of this section, or not specifically limited therein, may be subject to the payment of a surcharge fee, as determined from time to time by the General Manager which surcharge shall be based upon the additional unit cost incurred in the wastewater
monitoring, collection, transmission and treatment process attributed to such discharges.

(d) *Responsibility to meet standards.* The categorical pretreatment standards found at 40 CFR Chapter I, Subchapter N, Parts 405-471 are hereby incorporated. Any industrial discharger required under federal law to meet National categorical Pretreatment Standards for any pollutants shall meet these standards in its discharge provided that such categorical standards are more stringent than the local standards established under subsection(a) of this section for the pollutant. Where categorical standards are less stringent than the local standards the local standards shall apply. The General Manager may revise the discharge limits for specific pollutant(s) covered in the discharger's

expense, when directed by order of the director. Whenever the installation of a common manhole is impossible or impractical, the owner of such premises shall construct and maintain at his or her own expense, in lieu of the common manhole, two or more manholes as required by order of the General Manager, for accurate measurement of all flows discharged from such premises into the sewer system; in the event that no special manhole has been required, the control sample shall be taken at a point or points to be mutually selected by representatives of the General Manager and the user.

(3) *Method of analysis.* All measurements, tests, and analyses of the characteristics of waters and wastes to which reference is made in these regulations shall be determined in accordance with 40 CFR Part 136 to reflect the composition of the user's discharge to the public sewers.

(4) *Determination of constituent concentration.* The constituent concentrations of any wastewater shall usually be determined from representative samples discharged to the public sewers. The samples may be taken by representatives of the General Manager at sampling stations as described under subsection (2) of this section, at any period or time, or of such duration and in such a manner as determined by the General Manager. The intent of any sampling procedure is to establish the constituent concentrations in the wastewater discharged during an average or typical working day. These concentrations may be derived, according to the best judgment of the General Manager, by combining repeated sub-samplings during one day or by combination of a series of such days. The analysis of samples taken shall be performed by a laboratory mutually approved by the General Manager and the user. The acceptability of the wastes shall be as determined from said analysis.

(5) *Disputed constituent concentration.* In the event that the constituent concentration of the wastes discharged from an Industrial user to the POTW as determined under this section is disputed by the IU, the following procedure may be instituted:

a. Within five (5) days of receipt of the analysis in question, the IU shall submit a request for review setting forth the nature of the dispute and reasons for the request.

b. The General Manager shall evaluate the request based on the information provided in the request and approve or deny the same. If approval is granted, the General Manager shall determine if resampling is warranted.

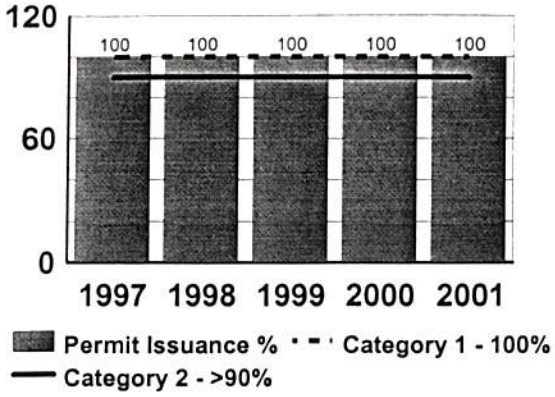
c. The results of the resampling and analysis shall not replace that of the disputed analysis in determining noncompliance. The results of the resampling and analysis shall be submitted to the General Manager for consideration of questions on mistakes and/or factors in billing or enforcement pursuant to this chapter.

ATTACHMENT 2

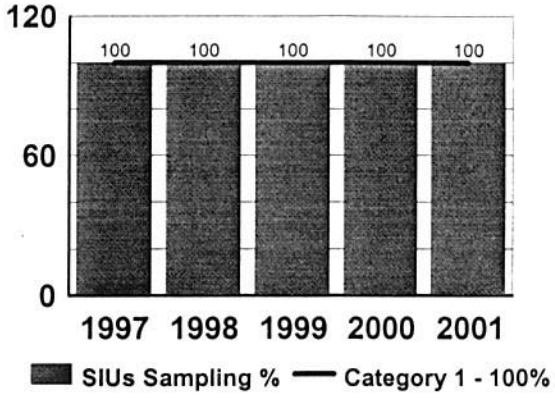
Pretreatment Audit Measures Charts

Pretreatment Audit Measures Charts For New Castle, DE

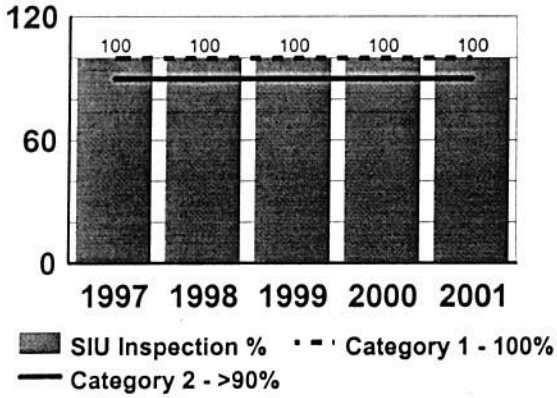
Permit Issuance Rate



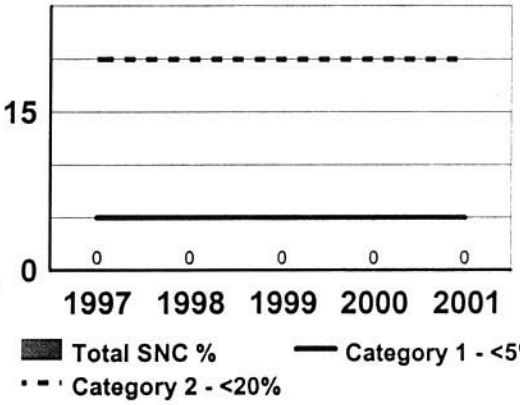
SIU Sampling Coverage



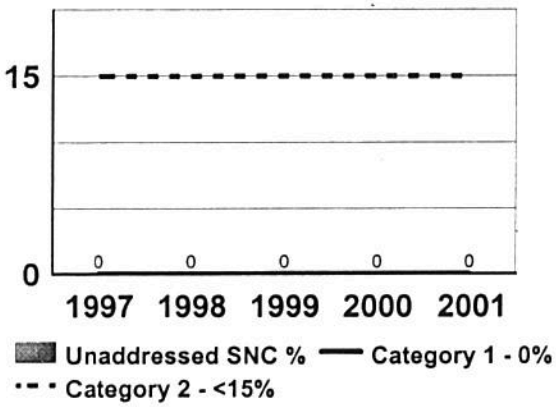
SIU Inspection Coverage



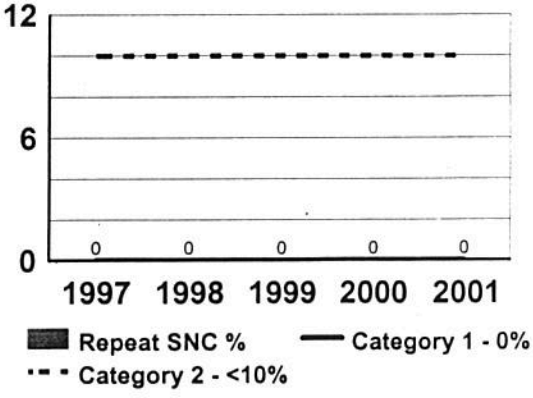
Total SNC Rate



Unaddressed SNC Rate



Repeat SNC Rate



ATTACHMENT 3

File Review Worksheets

Control Mechanism Worksheet

INDUSTRY NAME		**Johnson Controls**					
PERMIT EFFECTIVE DATE		**2/1/98**		PERMIT EXPIRATION DATE		**1/31/03**	
PARAMETER	LOCAL LIMITS[1]	CATEGORICAL STANDARD[2]		PERMIT LIMIT		REQUIRED SAMPLE TYPE	REQUIRED SAMPLE FREQUENCY
		MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM		
Lead (lbs/d)	0.063[3]	0.047	0.099	**0.109**	**0.235**	24-hour comp	1/week
Copper (lbs/d)	0.019[4]	0.234	0.444	**0.555**	**1.05**	24-hour comp	1/month
Nickel (mg/l)	0.020			**0.10**	**N/A**	24-hour comp	1/month
Arsenic (mg/l)	1.00				1.00[5]	24-hour comp	1/month
Cadmium (mg/l)	0.015				0.015[5]	24-hour comp	1/month
Chromium (mg/l)	1.50				1.50[5]	24-hour comp	1/month
Mercury (mg/l)	0.001				0.001[5]	24-hour comp	1/month
Molybdenum (mg/l)					N/A[5]	24-hour comp	1/month
Selenium (mg/l)	0.25				0.25[5]	24-hour comp	1/month

[1]Local limits are listed as 30-day averages in the ordinance.

[2]Limits based on allocations for battery wash and miscellaneous wastestreams (see Johnson inspection report in attachment 10) with a production of 193,781 lbs/d of lead used (production data from County file).

[3]Local limit of 0.50 mg/l @ permitted flow of 15,000 gpd.

[4]Local limit of 0.15 mg/l @ permitted flow of 15,000 gpd.

[5]This limit is listed in the required self-monitoring report form attached to the permit, but not in the limitations section of the permit itself.

INDUSTRY NAME		**Johnson Controls**					
PERMIT EFFECTIVE DATE		**2/1/98**		PERMIT EXPIRATION DATE		**1/31/03**	
PARAMETER	LOCAL LIMITS	CATEGORICAL STANDARD		PERMIT LIMIT		REQUIRED SAMPLE TYPE	REQUIRED SAMPLE FREQUENCY
		MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM		
Zinc (mg/l)	1.00				1.00[5]	24-hour comp	1/month
pH	6 - 9[6]				6 - 9[5]	recorded	continuous
Flow (gpd)					15,000		

[6]pH deviations between 5.0 and 11.0 are permitted for a total of 10% of the time in an 8-hour work shift if pH is continuously monitored and recorded.

Sampling Worksheet

INDUSTRY NAME		**Johnson Controls**			
CONTROL AUTHORITY MONITORING					
DATE SAMPLE COLLECTED	POLLUTANTS NOT SAMPLED	VIOLATIONS? (Y/N/PARAMETER)	DATE SAMPLE COLLECTED	POLLUTANTS NOT SAMPLED	VIOLATIONS? (Y/N/PARAMETER)
3/13/01	N/A	N	3/14/01	N/A	Y (pH)
4/19/01	Did pH, TSS, BOD	N	4/20/01	Did pH, TSS, BOD	N
8/8/01	Did pH, TSS, BOD	N	8/9/01	Did pH, TSS, BOD	N
11/10/01	N/A	Y (Ni, pH)			
INDUSTRIAL USER SELF-MONITORING					
IS THIS A RESAMPLE?	REPORT DUE DATE	REPORT RECEIVED	SAMPLE DATE(S)	POLLUTANTS NOT SAMPLED	VIOLATIONS? (Y/N/PARAMETER)
N	7/31/01	7/23/01[7]	[8]	N/A	N
N	1/31/02	1/25/02[7]	[9]	N/A	Y (pH)

[7]Date of cover letter.

[8]Copper - 1/2/01, 1/16, 2/6, 3/6, 4/3, 5/1, 6/2; Lead weekly (26 samples); Other metals & pH - 1/9, 2/13, 3/13, 4/10, 5/8, 6/12

[9]Copper - 7/3/01, 8/14, 9/4, 10/2, 11/6, 12/5; Lead weekly (26 samples); Other metals & pH - 7/10, 8/7, 8/14, 8/21, 9/12, 9/18, 10/9, 11/27, 12/11

Enforcement Worksheet

INDUSTRY NAME		**Johnson Controls**			
DATE OF VIOLATION	TYPE OF VIOLATION	TYPE OF ACTION AND DATE	ERP REQUIRED RESPONSE[10]	IU RESPONSE DATE	DATE COMPLIANCE ACHIEVED
3/14/01	pH (5.73)	None	[11]		4/10/01
9/18/01	pH (5.8)	None	[11]		10/9/01
10/19/01	failure to report resampling	None	NOV (1.0 pts)[12]		1/25/02
11/10/01	Ni (0.199)	None	NCN (0.5 pts)[13]		11/27/01
11/10/01	pH (5.00)	None	[11]		11/27/01

[10]If the total number of points exceeds 4.0 in any 180-day period, additional enforcement including fines, revocation of permit, and/or termination of service shall be initiated.

[11]ERP only requires a response to pH violations is the violations occur in 3 consecutive months (for monthly monitoring) or if the violations occur for more than 1 hour during a reporting period for continuous monitoring. This user appears to be conducting monthly monitoring, although the permit requires continuous monitoring.

[12]Enforcement response for a report that is more than 30 days late.

[13]Enforcement response for an effluent violation that is isolated and not signficiant.

Control Mechanism Worksheet

INDUSTRY NAME		MacDermid					
PERMIT EFFECTIVE DATE		2/23/00		PERMIT EXPIRATION DATE		2/23/05	
PARAMETER	LOCAL LIMITS[14]	CATEGORICAL STANDARD[15]		PERMIT LIMIT		REQUIRED SAMPLE TYPE	REQUIRED SAMPLE FREQUENCY
		MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM		
Acenaphthene		0.019	0.047	0.019	0.047	24-hour comp	1/6 months
Anthracene		0.019	0.047	0.019	0.047	24-hour comp	1/6 months
Benzene		0.057	0.134	0.057	0.134	grab	1/6 months
Bis(2-ethylhexyl) Phthalate		0.095	0.258	0.095	0.258	24-hour comp	1/6 months
Carbon Tetrachloride		0.142	0.380	0.142	0.380	grab	1/6 months
Chlorobenzene		0.142	0.380	0.142	0.380	grab	1/6 months
Chloroethane		0.110	0.295	0.110	0.295	grab	1/6 months
Chloroform		0.111	0.325	0.111	0.325	grab	1/6 months
Di-n-butyl Phthalate		0.020	0.043	0.020	0.043	24-hour comp	1/6 months
1,2-Dichlorobenzene		0.196	0.794	0.196	0.794	grab	1/6 months
1,3-Dichlorobenzene		0.142	0.380	0.142	0.380	grab	1/6 months
1,4-Dichlorobenzene		0.142	0.380	0.142	0.380	grab	1/6 months
1,1-Dichloroethane		0.022	0.059	0.022	0.059	grab	1/6 months

[14]Local limits are listed as 30-day averages in the ordinance.

[15]OCPSF Regulation requires that the concentration-based limits in the regulations be applied as mass-based limits in the user's permit.

INDUSTRY NAME		MacDermid					
PERMIT EFFECTIVE DATE		2/23/00		PERMIT EXPIRATION DATE		2/23/05	
PARAMETER	LOCAL LIMITS	CATEGORICAL STANDARD		PERMIT LIMIT		REQUIRED SAMPLE TYPE	REQUIRED SAMPLE FREQUENCY
		MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM		
1,2-Dichloroethane		0.180	0.574	0.180	0.574	grab	1/6 months
1,1-Dichloroethylene		0.022	0.060	0.025	0.060	grab	1/6 months
1,2-trans-Dichloroethylene		0.025	0.066	0.025	0.066	grab	1/6 months
1,2-Dichloropropane		0.196	0.794	0.196	0.794	grab	1/6 months
1,3-Dichloropropylene		0.196	0.794	0.196	0.794	grab	1/6 months
Diethyl Phthalate		0.046	0.113	0.046	0.113	24-hour comp	1/6 months
Dimethyl Phthalate		0.019	0.047	0.019	0.047	24-hour comp	1/6 months
4,6-Dinitro-o-cresol		0.078	0.277	0.078	0.277	24-hour comp	1/6 months
Ethylbenzene		0.142	0.380	0.142	0.380	grab	1/6 months
Fluoranthene		0.022	0.054	0.022	0.054	24-hour comp	1/6 months
Fluorene		0.019	0.047	0.019	0.047	24-hour comp	1/6 months
Hexachlorobenzene		0.196	0.794	0.196	0.794	24-hour comp	1/6 months
Hexachlorobutadiene		0.142	0.380	0.142	0.380	24-hour comp	1/6 months
Hexachloroethane		0.196	0.794	0.196	0.794	24-hour comp	1/6 months
Methyl Chloride		0.110	0.295	0.110	0.295	grab	1/6 months
Methylene Chloride		0.036	0.170	0.036	0.170	grab	1/6 months

INDUSTRY NAME		MacDermid					
PERMIT EFFECTIVE DATE		2/23/00		PERMIT EXPIRATION DATE		2/23/05	
PARAMETER	LOCAL LIMITS	CATEGORICAL STANDARD		PERMIT LIMIT		REQUIRED SAMPLE TYPE	REQUIRED SAMPLE FREQUENCY
		MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM		
Naphthalene		0.019	0.047	0.019	0.047	24-hour comp	1/6 months
Nitrobenzene		2.237	6.402	2.237	6.402	24-hour comp	1/6 months
2-Nitrophenol		0.065	0.231	0.065	0.231	24-hour comp	1/6 months
4-Nitrophenol		0.162	0.576	0.162	0.576	24-hour comp	1/6 months
Phenanthrene		0.019	0.047	0.019	0.047	24-hour comp	1/6 months
Pyrene		0.020	0.048	0.020	0.048	24-hour comp	1/6 months
Tetrachloroethylene		0.052	0.164	0.052	0.164	grab	1/6 months
Toluene		0.028	0.074	0.028	0.074	grab	1/6 months
1,2,4-Trichlorobenzene		0.196	0.794	0.196	0.794	24-hour comp	1/6 months
1,1,1-Trichloroethane		0.022	0.059	0.022	0.059	grab	1/6 months
1,1,2-Trichloroethane		0.032	0.127	0.032	0.127	grab	1/6 months
Trichloroethylene		0.026	0.069	0.026	0.069	grab	1/6 months
Vinyl Chloride		0.097	0.172	0.097	0.172	grab	1/6 months
Cyanide	0.30	0.420	1.200	**0.420**	1.200	24-hour comp	1/6 months
Lead	0.50	0.320	0.690	0.320	0.690	24-hour comp	1/6 months
Zinc	1.00	1.050	2.610	**1.050**	2.610	24-hour comp	1/6 months

INDUSTRY NAME		MacDermid					
PERMIT EFFECTIVE DATE		2/23/00		PERMIT EXPIRATION DATE		2/23/05	
PARAMETER	LOCAL LIMITS	CATEGORICAL STANDARD		PERMIT LIMIT		REQUIRED SAMPLE TYPE	REQUIRED SAMPLE FREQUENCY
		MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM		
Arsenic	1.00			[16]		24-hour comp	1/6 months
Cadmium	0.015			[16]		24-hour comp	1/6 months
Chromium	1.50			[16]		24-hour comp	1/6 months
Copper	0.15			[16]		24-hour comp	1/6 months
Mercury	0.001			[16]		24-hour comp	1/6 months
Molybdenum				[16]		24-hour comp	1/6 months
Nickel	0.020			[16]		24-hour comp	1/6 months
Selenium	0.25			[16]		24-hour comp	1/6 months
pH	6 - 9[17]			[16]		recorded	continuous
Flow (gpd)					8500		

[16]Refers to Chapter 10, Article A of the Middletown Town Code which incorporates the 30-day average County local limits by reference..

[17]PH deviations between 5.0 and 11.0 are permitted for a total of 10% of the time in an 8-hour work shift if pH is continuously monitored and recorded.

Sampling Worksheet

INDUSTRY NAME		**MacDermid**			
CONTROL AUTHORITY MONITORING					
DATE SAMPLE COLLECTED	POLLUTANTS NOT SAMPLED	VIOLATIONS? (Y/N/PARAMETER)	DATE SAMPLE COLLECTED	POLLUTANTS NOT SAMPLED	VIOLATIONS? (Y/N/PARAMETER)
3/13/01	OCPSF pollutants	Y (Cd, Ni, CN)[18]	3/14/01	OCPSF Pollutants	Y (Ni, Se, CN)
4/19/01	Did pH, BOD, TSS	N[19]	4/20/01	Did pH, BOD, TSS	N[20]
7/24/01	Did OCPSF polls.[21]	N	8/14/01	Did pH, BOD, TSS	N
8/15/01	Did pH, BOD, TSS	N[22]	11/13/01	OCPSF Pollutants	Y (Cd, Cu, Ni)[23]
INDUSTRIAL USER SELF-MONITORING					
IS THIS A RESAMPLE?	REPORT DUE DATE	REPORT RECEIVED	SAMPLE DATE(S)	POLLUTANTS NOT SAMPLED	VIOLATIONS? (Y/N/PARAMETER)
N	7/31/01	7/11/01	3/28/01	N/A	N[24]
N	1/31/02	1/16/02	7/25/01, 9/18, 11/7[25]	N/A	N

[18]BOD - 371 mg/l, ordinance limit is 350 mg/l

[19]BOD - 473 mg/l, ordinance limit is 350 mg/l

[20]BOD - 1093 mg/l, ordinance limit is 350 mg/l

[21]Company's lab did the analysis and sent the results to the County.

[22]BOD - 413 mg/l, ordinance limit is 350 mg/l

[23]BOD - 720 mg/l, ordinance limit is 350 mg/l

[24]Benzene, 1,1-dichloroethane, 1,1-dichloroethylene, 1,2-trans-dichloroethylene, tetrachloroethylene, toluene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene, vinyl chloride, and methylene chloride reported as non-detectable, but at a detection limit above the concentration limit in user's permit.

[25]3 pH results reported; all other parameters 1 result reported.

Enforcement Worksheet

INDUSTRY NAME		MacDermid			
DATE OF VIOLATION	TYPE OF VIOLATION[26]	TYPE OF ACTION AND DATE	ERP REQUIRED RESPONSE	IU RESPONSE DATE	DATE COMPLIANCE ACHIEVED
3/13/01	Cd (0.018)	None	NCN (0.5 pts)[27]		3/14/01
3/13/01	Ni (0.03)	None	NCN (0.5 pts)[27]		3/28/01
3/13/01	CN (0.58)	None	NCN (0.5 pts)[27]		3/28/01
3/14/01	Ni (0.034)	None	Compliance Schedule (2.0 pts)[28]		3/28/01
3/14/01	Se (0.812)	None	NCN (0.5 pts)[27] Fine (> 4.0 pts)		3/28/01
3/14/01	CN (0.72)	None	Compliance Schedule (2.0 pts)[28] Fine (> 4.0 pts)		3/28/01
11/13/01	Cd (0.027)	None	Compliance Schedule (2.0 pts)[28]		[29]
11/13/01	Cu (0.284)	None	NCN (0.5 pts)[27]		[29]
11/13/01	Ni (0.245)	None	Compliance Schedule (2.0 pts)[28] Fine (>4.0 pts)		[29]

[26]Limits are listed in the self-monitoring report form as daily maximums, but are listed in the ordinance as 30-day averages. It is unclear whether the report form (as opposed to the permit itself) can legally establish the limits as daily maximums, but the compliance evaluation was completed based on the limits as daily maximums.

[27]Enforcement response for effluent violation that is isolated and not significant.

[28]Enforcement response for effluent violation that is recurring with no harm.

[29]No monitoring data in the file since this violation occurred (> 6 months).

ATTACHMENT 4

Permit Form Review

Permit Form Review

New Castle County
January 28, 2002

As part of the audit conducted of the pretreatment program of the City of Wilmington, a review of two sample permits was conducted. Since New Castle County issues permits as part of the Wilmington program, a permit issued by New Castle County was reviewed in addition to the review of a permit issued by the City. For the County review, the permit issued to ICI Americas/Avecia, Inc., effective April 18, 1999 was used. In addition to the key elements of the permit that are evaluated during the file review, a review of the permit was conducted to evaluate consistency with the General Pretreatment Regulations and local ordinances. Even where the permit is not inconsistent with EPA regulations or local ordinances, the provisions of the permit have been reviewed for suggested wording changes to strengthen or clarify the permits. Comments detailed below are intended to clarify the notations on the attached permit. Typographical errors identified during the review are noted on the attached copy of the reviewed permit.

Page 1

The introductory language to the permit references the General Pretreatment Regulations as "40 CFR Parts 125 and 403." However, 40 CFR Part 125 applies to direct discharging facilities and not to the pretreatment program. This reference is confusing at best, and therefore the reference to 40 CFR Part 125 **must** be removed.

This permit was apparently issued on August 25, 1999, but is listed as having become effective on April 18, 1999. This potentially creates a situation where a user must comply with a requirement before it receives notification of that requirement. In general, permits cannot include an effective date that is before the issuance date.

Page 3

Section B.1 is titled "Permissible Concentrations". However, the limitations in this section are mass based. It is **recommended** that the title of this section be changed to something similar to "Permissible Limitations". In addition, this provision requires compliance with "limitations as defined in New Castle County Code, Chapter 38, Article II, Division B". The specific numerical limitations are then included in the attachment on the periodic self-monitoring report form. While this is acceptable, it is **recommended** that the limitations be specifically listed within the body of the permit rather than only on the self-monitoring report form. Finally, Section B.1 references attachment A-2 for the pretreatment standards for facilities subject to the organic chemicals effluent guideline. However, the attachment to the permit is not labeled this way. The reference and the attachment **must** be referenced consistently.

Section B.2 incorporates by reference the Organic Chemicals, Plastics and Synthetic Fibers categorical standards, and states that where the categorical and local standards regulate the same pollutants, the more stringent limit applies. Again, while this is acceptable, it is **recommended** that the specific categorical standards be listed in the body of the permit. Since

the same sample point is being used for the categorical and local standards, it is **recommended** that the limitations for cyanide, lead, and zinc be compared and the more stringent included in the listing of limitations. As an alternative, since the categorical standards are applied as mass limits and the local standards are applied as concentration limits, the listing for each pollutant could include both a concentration limit (local limit) and a mass limit (categorical limit) even if they do not represent the same limit.

Section B.3.c states that the location for the installation of a flow meter is "N/A". While it appears that this was intended to suggest that a flow meter has already been installed, it could be interpreted to suggest that a flow meter is not required, and the user can remove the existing flow meter if desired. It is **recommended** that this language be removed from the permit to eliminate any potential confusion, and only the language requiring maintenance and calibration of the flow meter be retained.

Page 4

Since the permit includes a flow limit, it is **recommended** that flow reporting be required.

Page 5

Section C.2.b of the permit states that the location for the installation of a sampling and inspection manhole is "N/A". Again, it is **recommended** that this language be removed from the permit rather than be listed as not applicable.

Page 6

Section C.4 refers to attachments A-1 and A-2. As noted earlier, the attachment to the permit is not labeled this way, and the reference to the attachment **must** be made consistent with the attachment itself. This section also incorporates EPA's signatory requirements by reference (40 CFR 403.12(l)). While incorporation by reference is acceptable, for ease of use by the permittee, it is **recommended** that the signatory requirements be specified in the permit rather than incorporated by reference. For purposes of certification of reports, the reference in this permit is acceptable because the facility is subject to categorical standards. However, for significant users in New Castle County that are not subject to categorical standards, this reference is not acceptable for purposes of certification of reports. 40 CFR 403.12(l) requires that categorical reports be certified. Section 38-269(e) of New Castle County's ordinance requires that all reports be certified. Therefore, the permit form (at least for significant non-categorical users) **must** be revised to require the certification for all users. The best way to do this would be to include the specific certification requirement in the permit rather than referencing EPA regulations or the County ordinance. In addition, it is **recommended** that the specific dates on which the self-monitoring reports are due be included in the permit (i.e., January 31 and July 31).

Section C.5 of the permit states that all records resulting from monitoring activities must be maintained for a minimum of three years as required by EPA regulations. However, this section does not indicate which records need to be generated during monitoring activities. Section C.4 indicates that specific information must be included in the report to the County which means that those pieces of information must be generated and therefore maintained.

However, the listing of information that must be reported as per section C.4 does not include all of the records required to be maintained under 40 CFR 403.12(o). Information not required to be maintained by the County's permit includes the sample time, sampler name, date of sample analysis, and the analyst name. At a minimum, these **must** be added to the requirements of the permit. Although not specifically required under 40 CFR 403.12(o), it is **recommended** that a requirement to maintain the sample preservation information be included as well. It is also **recommended** that section C.5 of the permit be revised to include a listing of all of the records which must be maintained, as is done in 40 CFR 403.12(o).

Section D.1 of the permit requires that the permittee notify the County "within 24 hours of the occurrence" of a violation. Since a violation could be considered to have "occurred" at the time that the discharge occurred rather than the time when the user gets the sample results back, this provision might be interpreted to require the user to report that a violation occurred before it has received the sample results which tell it that the violation occurred. It is **recommended** that this provision be revised to require reporting within 24 hours "of becoming aware of the violation." In addition, while a written report of the violation must be submitted within 5 days, no specifics are provided indicating what must be in the report. It is **recommended** that this provision require that the report include such information as the cause of the violation (or the steps being taken by the user to identify the cause), whether the violation is ongoing, and the steps being taken by the user to return to compliance and ensure that the violation does not recur.

Section D.2 of the permit requires that the permittee notify "the Department" if hazardous waste is discharged. While it is presumed that this is meant to refer to New Castle County, the only "Department" cited in this section is the Delaware Department of Natural Resources and Environmental Conservation (DE DNREC), and therefore the reference to "the Department" may be confusing. Since EPA's regulations require that the notification in the event of a discharge of hazardous waste into the sewer be made to the County, DE DNREC, and EPA, this provision **must** be revised to expand the reporting requirement to include all three agencies. In addition, since the permit is primarily meant to regulate discharges to the sewer, it is **recommended** that the language be revised to require reporting of the discharge of hazardous waste "into the POTW."

Section D.3 of the permit requires notification by the user in the event of any slug loading which causes interference. 40 CFR 403.12(f) requires notification of any discharges which could cause problems in the POTW, or any other discharges which constitute slug loadings as defined by 40 CFR 403.5(b). The "could cause problems" language of EPA's regulations is broader than the permit language of this section, and 403.5(b) defines slug loads more broadly than just those causing interference. Therefore, this section **must** be revised to be equivalent to 40 CFR 403.12(f).

Section E.2 of the permit requires that all metals analysis be conducted in accordance with 40 CFR Part 136. This is appropriate, although it is unclear why this is listed as a special condition when it applies generally. It is **recommended** that this provision be moved out of the special conditions section. In addition, the provision **must** be revised to require that all sampling

and analysis conducted under the permit be done in accordance with Part 136. While section C.4 of the permit requires that the user certify that all sampling and analysis methods conform to EPA required methods, it does not actually require the use of those methods, and therefore does not satisfy the requirement that the permit require the use of sampling and analysis methods from Part 136.

Section E.3 and E.4 of the permit require that grab and 24-hour composite sampling be "a representative sample". Although this is acceptable language, it is **recommended** that it be revised to "a sample representative of normal discharges occurring during the monitoring period." In addition, since this is a standard requirement applicable to all users, it is **recommended** that it be moved out of the special conditions section and into the general conditions section of the permit. It also appears that these two sections could be combined to simply require that sampling be representative without making a distinction between grab and composite sampling.

Missing Provisions

40 CFR 403.8(f)(1)(iii)(E) requires that the permit include a statement of applicable civil and criminal penalties. A provision which does this was not found in the permit and therefore **must** be added. In addition, Section 38-276 of the New Castle County ordinance allows for termination of service or revocation of the user's permit under certain circumstances. Although not specifically required by EPA regulations, it is **recommended** that the permit include a provision notifying the user of the potential for termination of service or permit revocation to ensure that the user is aware of this potential enforcement action.

Typographical Errors

Two apparent typographical errors are noted on the attached permit form on page 4. In addition, it appears that the "Sampling" section on page 5 should have a "2." before it.

THOMAS P. GORDON
COUNTY EXECUTIVE

JOSEPH J. FREEBERY
GENERAL MANAGER

DEPARTMENT OF SPECIAL SERVICES

August 25, 1999

Ms. Keena Dautlick
ICI America, Inc. / Avecia Inc.
Chemical Engineering Labs
233 Cheery Lane
New Castle, DE 19720

RE: Wastewater Discharge Permit WDP 99-101
ICI America Inc. / Avecia Inc.

Dear Ms. Dautlick

In accordance with the provisions of the New Castle County Code, Chapter 38, Article II, Division 8, entitled "Regulation of Nondomestic Wastewater Discharges into the Public Sewer System", the attached final permit is hereby issued to ICI America Inc./ Avecia Inc., located in New Castle, Delaware.

This permit is issued for a period of five (5) years and supersedes all previous permits issued to this facility. Please note the requirements on records retention, notification of non-compliance, slug loading, and self monitoring. Monitoring reports shall be submitted each July and January for the previous six-month period. As requested in your permit application the ammonia variance of 400 lbs/day has been retained and the BOD limit has been increasing to 1350 lbs/day.

Should you have any questions or require further information on the above, please contact Kiran Pathak at 395-5728.

Sincerely,

James D. Houston
Chief of Environmental Engineering(Acting)

Encl.

cc: Joseph J. Freebery/David A. Hofer NCC
Sid Sharma, City of Wilmington, Encl.
Kiran Pathak, NCC

file c:\permit#\99-101 \prmltr.wpd

187A OLD CHURCHMANS ROAD NEW CASTLE, DE 19720 PHONE 302-395-5700 FAX 302 395 5787

Permit Number 99-101
Revision Number 0

NEW CASTLE COUNTY
DEPARTMENT OF SPECIAL SERVICES
187-A Old Churchmans Road
New Castle, Delaware 19720

WASTEWATER DISCHARGE PERMIT

In accordance with the provisions of the General Pretreatment Regulations at 40 CFR Parts 125 and 403, and pursuant to New Castle County Code, Chapter 38, Article II, Division 8 entitled "Regulation of Nondomestic Wastewater Discharges into the Public Sewer System," as amended September 18, 1996 and any applicable Federal or State law or regulation:

ICI Americas, Inc./Avecia Inc.
233 Cherry Lane
New Castle, Delaware, 19720

is authorized to discharge wastewater to the New Castle County Sewer System from the facility located at:

ICI Americas, Inc./Avecia Inc., Chemical Engineeering Labs
New Castle, Delaware,

subject to the permit conditions established herein.

Effective Date: April 18,1999

Expiration Date: April 17, 2004

Date: 8/25/99

Signed: James A Shuter
Environmental Compliance Manager

PERMIT CONDITIONS

A. General.

1. The named permit holder shall be expressly subject to all provisions of New Castle County Code, Chapter 38, Article II, Division 8 and all other regulations, user charges, and fees established by the County.

2. This Wastewater Discharge Permit is issued in the name of the permit holder and shall not be reassigned, transferred or sold to a new owner, new user, different premises, or a new or changed operation.

3. The permit holder shall report to New Castle County any changes (permanent or temporary) to the premises or operations that significantly change the quality or quantity of the wastewater discharge described in the Wastewater Discharge Permit Application submitted by the permit holder, or deviate from the terms or conditions under which this permit is granted.

4. The permit holder may be held liable for any actual damages and/or extraordinary expenses incurred by the Publicly Owned Treatment Works (POTW) caused in full or in part by the permit holder as determined from the investigation and findings of the Department of Special Services. The Department may seek to recover reasonable attorney's fees, court costs, monitoring costs, and other expenses associated with cost recovery and other enforcement activities.

5. This permit is subject to revision to reflect any changes to the County code or any applicable categorical standards as and when they are promulgated by the USEPA.

6. The permit holder is subject to all enforcement actions, to include penalties established in New Castle County Code, Chapter 38, Article II, Division 8, for violating permit conditions.

7. All reports and correspondence shall be submitted to the following address:

Chief of Environmental Engineering
Department of Special Services
Engineering & Environmental Services Division
187-A Old Churchmans Road
New Castle, Delaware 19720

B. Effluent Limitations. mass limits

1. Permissible Concentrations. The discharge from the designated location shall be limited to the effluent quality limitations as defined in New Castle County Code, Chapter 38, Article II, Division 8 except for the following: include limits here

Effluent Constituent	30 Day Average	Maximum Daily
Ammonia	400 lb/Day	N/A
BOD	1350 Lb/day	N/A

This site is subject to pretreatment standards for existing sources for organic chemicals, plastics and synthetic fibers (OCPSF). Refer to Attachmennt A-2 of this permit. not labeled this way

2. Categorical Limitations. Discharge is subject to the categorical pretreatment standards for: **Organic Chemicals, Plastics, and Synthetic Fibers** . These standards shall be in addition to the general prohibitions of the New Castle County Code, Chapter 38, Article II, Division 8, and in cases where the same constituent is addressed, the more stringent limitation will apply. include mass limits here compare lead, zinc, & cyanide & only list more stringent

3. Rate of Discharge.

a. The daily average discharge shall mean the total discharge in gallons during a six month monitoring period divided by the number of days in the period in which production was occurring or the commercial facility was operating. The daily average discharge permitted at the facility shall not exceed:

200,000 GPD

b. The maximum instantaneous discharged flow rate shall not exceed:

N/A

c. A meter to measure the wastewater discharge shall be installed at the following location:

N/A no flow meter required or just already installed

By (date): N/A

Metering devices pertinent to the discharge(s) shall be maintained in good working order and calibrated at least annually.

C. Monitoring, Sampling, Inspections, Reporting, and Records Retention.

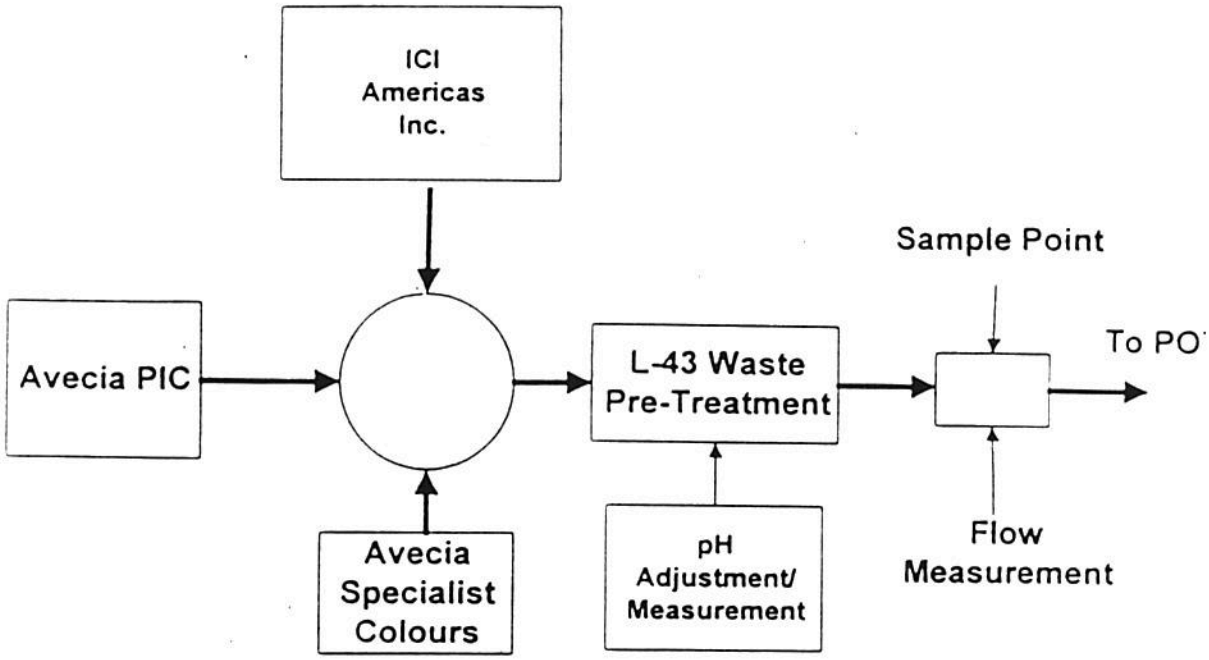
1. Monitoring. The permitted discharge shall be monitored by the permit holder in compliance with the following schedule:

Effluent Constituent	Measurement Frequency	Sample Type
pH	Continuous	Recording
BOD	1/Month	24-hr Composite
Ammonia	1/Month	24-hr Composite
As, Cd, Cr, Cu, Hg	1/ 6 Months	24 -hr Composite
Mo, Ni, Pb, Se, Zn,	1/ 6 Months	24- hr Composite
OCPSF Organics:		
Purgeable Organics	1/ 6 Months	Composite of 4 Grabs
Base Neutrals/Acids	1/ 6 Months	24 -hr Composite
Pesticides	1/ 6 Months	24 -hr Composite

flow monitoring ?

2. Sampling.

a. Samples taken in compliance with the monitoring requirements specified above shall be collected at the following locations:



b. In accordance with New Castle County Code, Chapter 38, Article II, Division 8, the permit holder is required to install a sampling and inspection manhole at the following location:

N/A.
By (date): N/A.

no manhole required or just already installed?

3. Inspections. Duly authorized employees of New Castle County, bearing proper credentials and identification, shall be permitted to enter all premises in compliance with New Castle County Code, Chapter 38, Article II, Division 8 for the purpose of inspection of processes, records, and the like.

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4. Periodic Discharge Reports and Progress Reports on Compliance Schedule. A report containing the results of the monitoring program and progress reports on compliance (if any) shall be filed with the New Castle County Department of Special Services in January and July of each year for the previous six-month period. The results of all self-monitoring, including the results of monitoring done more frequently than required, shall be submitted. Reports shall be submitted in the attached format (Attachments A-1 and A-2 of this permit).

not labeled this way

The report shall include at a minimum the following:

required to use?

incomplete

Nature and concentration of regulated pollutants, average and maximum daily flow rates, methods of sampling and analysis, sample site, date of sample and flow rate at time of sampling, certification of meter calibration, and a certification that the methods used conform to those approved by the U.S. E.P.A. Reports shall be signed in compliance with the signatory requirements in 40 CFR 403.12 (l). If analysis results indicate a particular pollutant is not detected, the detection limit shall be reported..

list out requirements; does not require non-categorical certification

5. Records Retention. All records and information resulting from the monitoring activities required by this permit, including all records of analyses performed, calibration and maintenance of instrumentation, and continuous monitoring charts shall be retained for three (3) years. This period shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or control standards applicable to the permittee, or as requested by the Department.

list all records required to be maintained here.

D. Notice Requirements.

1. Noncompliance Notification. If the permitted discharge does not comply with any effluent limitations specified in this permit or in the New Castle County Code, the permittee shall inform the Department via telephone at 395-5740 or the County Dispatcher at 323-2649 within 24 hours of the occurrence and follow up with written notification within 5 days. The permittee shall also repeat sampling and analysis and submit the results within 30 days of becoming aware of the violation.

including what

becoming aware of the violation

2. RCRA Notification. The permitted facility may be subject to hazardous waste requirements under the Resource Conservation and Recovery Act, Subtitles C & D. The State of Delaware Department of Natural Resources and Environmental Control, Division of Air and Waste Management, 89 Kings Highway, PO Box 1401, Dover Delaware 19903 regulates hazardous waste in the state and must be contacted to determine your obligations, if any, under this Act. The permitted facility shall also notify the Department in the event of discharge of hazardous waste, in accordance with 40 CFR 403.12 (p) (1). Cou or;

into the POTW

3. Notice of Slug Loading. In accordance with 40 CFR Part 403, Section 403.12(f), the discharger shall immediately notify the Department of any slug loading of any pollutant (including oxygen demanding pollutants) released to the treatment system at a flow rate or concentration likely to cause interference to the system. (Call 395-5740 during office hours, 323-2649 at other times.)

overly limiting

which could cause problems

E. Special Conditions.

1. This Wastewater Discharge Permit supersedes permit No. 93-085 issued to ICI Americas Inc./ Zeneca Inc., Chemical Engineering Lab dated April 18, 1994 and any other approval and/or permit for wastewater discharge issued previous to the effective date of this permit.

2. All ~~metals~~ analyses conducted in accordance ~~with Section C1 of this~~ permit shall conform to 40 CFR 136 analytical methods ~~for determination of total metals concentrations~~, unless stated otherwise.

combine

3. The grab sampling specified in Section C1 shall be a representative ~~sample~~ and performed during hours in which which the facility is operating

4. The 24 hour composite sampling specified in section C.1. shall be performed during hours which production is occurring or the commercial facility is operating, and be representative

of normal discharges occurring during the monitoring period

Periodic Self-Monitoring Report

Reporting Period January - June / July - December

Permit Number 99-101
Revision Number 0
Attachment 1 of 6

Industry ICI Americas Inc / Avecia Inc.

Part I - Analysis Results

Parameter		pH	BOD	AMMONIA	TOTAL As	TOTAL Cd	TOTAL Cr	TOTAL Cu	TOTAL Hg	TOTAL Mo	TOTAL Ni	TOTAL Pb	TOTAL Se	TOTAL Zn
Frequency		1/Month	1/Month	1/Month	1/6 Months	1/6 Months	1/6 Months	1/6 Months	1/6 Months	1/6 Months	1/6 Months	1/6 Months	1/6 Months	1/6 Months
Limits	Max	6-9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Avg	N/A	1350	400	0.24	2.0	4.0	3.0	0.045	N/A	1.0	9.0	N/A	14.0
Units		S.U.	Lbs/Day	lbs/day	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Date	Flow	Analysis Results												
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(Use copies of this form if additional space is required)

Periodic Self-Monitoring R ort (OCPSF)

Reporting Period: January - June / July - December

Permit Number 99-101

Revision Number 0

Sample Date(s):

ICI Americas Inc / Avecia Inc., Chemical Engineering Labs: KM Toffee Process

Parameter	Limits (lb/day) Max any one day	Limits (lb/day) Max Monthly Avg.	Reported Values (lb/day) Max any one day	Reported Values (lb/day) Max Monthly Avg.
Acenaphthene	0.0019	0.0008		
Anthracene	0.0019	0.0008		
Benzene	0.0055	0.0024		
Bis (2-ethylhexyl) phthalate	0.0107	0.0039		
Carbon Tetrachloride	0.0157	0.0059		
Chlorobenzene	0.0157	0.0059		
Chloroethane	0.0122	0.0045		
Chloroform	0.0134	0.0046		
Di-n-butyl phthalate	0.0018	0.0008		
1,2-Dichlorobenzene	0.0328	0.0081		
1,3-Dichlorobenzene	0.0157	0.0059		
1,4-Dichlorobenzene	0.0157	0.0059		
1-1-Dichloroethane	0.0024	0.0009		
1-2-Dichloroethane	0.0237	0.0074		
1,1-Dichloroethylene	0.0025	0.0009		
1,2-trans -Dichloroethylene	0.0027	0.0010		
1,2-Dichloropropane	0.0328	0.0081		
1,3-Dichloropropylene	0.0328	0.0081		
Diethyl phthalate	0.0047	0.0019		
Dimethyl phthalate	0.0019	0.0008		
4,6-Dinitro-o-cresol	0.0115	0.0032		
Ethylbenzene	0.0157	0.0059		
Fluoranthene	0.0022	0.0009		
Fluorene	0.0019	0.0008		
Hexachlorobenzene	0.0328	0.0081		
Hexachlorobutadiene	0.0157	0.0059		
Hexachloroethane	0.0328	0.0081		
Methyl Chloride	0.0122	0.0045		
Methylene Chloride	0.0070	0.0015		
Napthalene	0.0019	0.0008		
Nitrobenzene	0.2647	0.0925		
2-Nitrophenol	0.0096	0.0027		
4-Nitrophenol	0.0238	0.0067		
Phenanthrene	0.0019	0.0008		
Pyrene	0.0020	0.0008		
Tetrachloroethylene	0.0068	0.0022		
Toluene	0.0031	0.0012		
Total Cyanide	0.0496	0.0174		
Total Lead	0.0285	0.0132		
Total Zinc	0.1079	0.0434		
1,2,4-Trichlorobenzene	0.0328	0.0081		
1,1,1-Trichloroethane	0.0024	0.0009		
1,1,2-Trichloroethane	0.0053	0.0013		
Trichloroethylene	0.0029	0.0011		
Vinyl Chloride	0.0071	0.0040		

Periodic Self-Monitoring Report (OCPSF)

Reporting Period: January - June / July - December

Permit Number 99-101

Revision Number 0

Sample Date(s):

ICI Americas Inc. / Avecia Inc., Chemical Engineering Labs: KM Leaching Process

Parameter	Limits (lb/day) Max any one day	Limits (lb/day) Max Monthly Avg.	Reported Values (lb/day) Max any one day	Reported Values (lb/day) Max Monthly Avg.
Acenaphthene	0.0234	0.0095		
Anthracene	0.0234	0.0095		
Benzene	0.0667	0.0284		
Bis (2-ethylhexyl) phthalate	0.1284	0.0473		
Carbon Tetrachlonde	0.1890	0.0706		
Chlorobenzene	0.1890	0.0706		
Chloroethane	0.1468	0.0547		
Chloroform	0.1617	0.0552		
Di-n-butyl phthalate	0.0214	0.0099		
1,2-Dichlorobenzene	0.3950	0.0975		
1,3-Dichlorobenzene	0.1890	0.0706		
1,4-Dichlorobenzene	0.1890	0.0706		
1-1-Dichloroethane	0.0294	0.0109		
1-2-Dichloroethane	0.2856	0.0895		
1,1-Dichloroethylene	0.0298	0.0109		
1,2-trans -Dichloroethylene	0.0328	0.0124		
1,2-Dichloropropane	0.3950	0.0975		
1,3-Dichloropropylene	0.3950	0.0975		
Diethyl phthalate	0.0562	0.0229		
Dimethyl phthalate	0.0234	0.0095		
4,6-Dinitro-o-cresol	0.1378	0.0388		
Ethylbenzene	0.1890	0.0706		
Fluoranthene	0.0269	0.0109		

Parameter	Limits (lb/day) Max any one day	Limits (lb/day) Max Monthly Avg.	Reported Values (lb/day) Max any one day	Reported Values (lb/day) Max Monthly Avg.
Fluorene	0.0234	0.0095		
Hexachlorobenzene	0.3950	0.0975		
Hexachlorobutadiene	0.1890	0.0706		
Hexachloroethane	0.3950	0.0975		
Methyl Chlonde	0.1468	0.0547		
Methylene Chlonde	0.0846	0.0179		
Napthalene	0.0234	0.0095		
Nitrobenzene	3.1849	1.1129		
2-Nitrophenol	0.1149	0.0323		
4-Nitrophenol	0.2866	0.0806		
Phenanthrene	0.0234	0.0095		
Pyrene	0.0239	0.0099		
Tetrachloroethylene	0.0816	0.0259		
Toluene	0.0368	0.0139		
Total Cyanide	0.5970	0.2089		
Total Lead	0.3433	0.1592		
Total Zinc	1.2984	0.5224		
1,2,4-Trichlorobenzene	0.3950	0.0975		
1,1,1-Trichloroethane	0.0294	0.0109		
1,1,2-Trichloroethane	0.0632	0.0159		
Trichloroethylene	0.0343	0.0129		
Vinyl Chlonde	0.0856	0.0483		

Periodic Self-Monitoring Report (OCPSF)

Reporting Period: January - June / July - December

Permit Number: 99-101

Revision Number: 0

Sample Date(s):

ICI Americas Inc / Avecia Inc., Chemical Engineering Labs; PEEK Leaching Process

Parameter	Limits (lb/day) Max any one day	Limits (lb/day) Max Monthly Avg	Reported Values (lb/day) Max any one day	Reported Values (lb/day) Max Monthly Avg
Acenaphthene	0.0115	0.0047		
Anthracene	0.0115	0.0047		
Benzene	0.0329	0.0140		
Bis (2-ethylhexyl) phthalate	0.0633	0.0233		
Carbon Tetrachloride	0.0932	0.0348		
Chlorobenzene	0.0932	0.0348		
Chloroethane	0.0723	0.0270		
Chloroform	0.0797	0.0272		
Di-n-butyl phthalate	0.0105	0.0049		
1,2-Dichlorobenzene	0.1947	0.0481		
1,3-Dichlorobenzene	0.0932	0.0348		
1,4-Dichlorobenzene	0.0932	0.0348		
1-1-Dichloroethane	0.0145	0.0054		
1-2-Dichloroethane	0.1407	0.0441		
1,1-Dichloroethylene	0.0147	0.0054		
1,2-trans -Dichloroethylene	0.0162	0.0061		
1,2-Dichloropropane	0.1947	0.0481		
1,3-Dichloropropylene	0.1947	0.0481		
Diethyl phthalate	0.0277	0.0113		
Dimethyl phthalate	0.0115	0.0047		
4,6-Dinitro-o-cresol	0.0679	0.0191		
Ethylbenzene	0.0932	0.0348		
Fluoranthene	0.0132	0.0054		

Parameter	Limits (lb/day) Max any one day	Limits (lb/day) Max Monthly Avg	Reported Values (lb/day) Max any one day	Reported Values (lb/day) Max Monthly Avg
Fluorene	0.0115	0.0047		
Hexachlorobenzene	0.1947	0.0481		
Hexachlorobutadiene	0.0932	0.0348		
Hexachloroethane	0.1947	0.0481		
Methyl Chloride	0.0723	0.0270		
Methylene Chloride	0.0417	0.0088		
Napthalene	0.0115	0.0047		
Nitrobenzene	1.5695	0.5484		
2-Nitrophenol	0.0566	0.0159		
4-Nitrophenol	0.1412	0.0397		
Phenanthrene	0.0115	0.0047		
Pyrene	0.0118	0.0049		
Tetrachloroethylene	0.0402	0.0127		
Toluene	0.0181	0.0069		
Total Cyanide	0.2942	0.1030		
Total Lead	0.1692	0.0785		
Total Zinc	0.6399	0.2574		
1,2,4-Trichlorobenzene	0.1947	0.0481		
1,1,1-Trichloroethane	0.0145	0.0054		
1,1,2-Trichloroethane	0.0311	0.0078		
Trichloroethylene	0.0169	0.0064		
Vinyl Chloride	0.0422	0.0238		

Periodic Self-Monitoring R ort (OCPSF)

Reporting Period: January - June / July - December

Permit Number: 99-101

Revision Number: 0

Sample Date(s):

ICI Americas Inc / Avecia Inc , Chemical Engineering Labs; PEEK Toffee Process

Parameter	Limits (lb/day) Max any one day	Limits (lb/day) Max Monthly Avg.	Reported Values (lb/day) Max any one day	Reported Values (lb/day) Max Monthly Avg.
Acenaphthene	0.0022	0.0009		
Anthracene	0.0022	0.0009		
Benzene	0.0063	0.0027		
Bis (2-ethylhexyl) phthalate	0.0120	0.0044		
Carbon Tetrachlonde	0.0177	0.0066		
Chlorobenzene	0.0177	0.0660		
Chloroethane	0.0138	0.0051		
Chloroform	0.0152	0.0052		
Di-n-butyl phthalate	0.0020	0.0009		
1,2-Dichlorobenzene	0.0371	0.0092		
1,3-Dichlorobenzene	0.0177	0.0066		
1,4-Dichlorobenzene	0.0177	0.0066		
1-1-Dichloroethane	0.0028	0.0010		
1-2-Dichloroethane	0.0268	0.0084		
1,1-Dichloroethylene	0.0028	0.0010		
1,2-trans -Dichloroethylene	0.0031	0.0012		
1,2-Dichloropropane	0.0371	0.0092		
1,3-Dichloropropylene	0.0371	0.0092		
Diethyl phthalate	0.0053	0.0021		
Dimethyl phthalate	0.0022	0.0009		
4,6-Dinitro-o-cresol	0.0129	0.0036		
Ethylbenzene	0.0177	0.0066		
Fluoranthene	0.0025	0.0010		
Fluorene	0.0022	0.0009		
Hexachlorobenzene	0.0371	0.0092		
Hexachlorobutadiene	0.0177	0.0066		
Hexachloroethane	0.0371	0.0092		
Methyl Chlonde	0.0138	0.0051		
Methylene Chlonde	0.0079	0.0017		
Napthalene	0.0022	0.0009		
Nitrobenzene	0.2990	0.1045		
2-Nitrophenol	0.0108	0.0030		
4-Nitrophenol	0.0269	0.0076		
Phenanthrene	0.0022	0.0009		
Pyrene	0.0022	0.0009		
Tetrachloroethylene	0.0077	0.0024		
Toluene	0.0035	0.0013		
Total Cyanide	0.5600	0.0196		
Total Lead	0.0322	0.0149		
Total Zinc	0.1219	0.0490		
1,2,4-Trichlorobenzene	0.0371	0.0092		
1,1,1-Trichloroethane	0.0028	0.0010		
1,1,2-Trichloroethane	0.0059	0.0015		
Trichloroethylene	0.0032	0.0012		
Vinyl Chloride	0.0080	0.0045		

Periodic Self-Monitoring Report

Permit Number: WDP-99-101
Revision Number: 0
Attachment 6 Of 6

Reporting Period: January - June / July - December

Industry: ICI Americas Inc. / Avecia Inc., CEL

Part II - Flow Rates

	Max	Avg		Max	Avg
Permitted Flow (GPD)	N/A	200,000	Reported Flow (GPD)		

Part III - Methods

A. Sampling Method

All samples are flow / time (circle one) proportioned composites except for purgeable parameters which are laboratory composites of four (4) grab samples collected over the period of the discharge. Variances from the method are as below (Indicate sample date, parameter, and reason):

B. Methods of Analysis

All analytical methods conform to those approved by the U.S. EPA except:

Part IV- Certification

A. Results indicate that the wastewater discharge standards are being met on a consistent basis: ____Yes ____No
If 'No', explain on a separate sheet what steps are being taken to achieve consistent compliance.

B. The inflow meter has been calibrated within the past year: _____ Yes _____ No

Date of last calibration: ______________________

C. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person(s) who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

______________________ Authorized Representative

______________________ Date

______________________ Name

______________________ Title

ATTACHMENT 5

Documentation of Permit Decisions
(Excerpt from EPA Permitting Guidance)

ATTACHMENT 6

Sample Slug Control Plan Review Checklist
(Excerpt from EPA Slug Control Guidance)

ATTACHMENT 7

Signatory Requirements for Industrial User Reports

ATTACHMENT 8

EPA "Listserve" Information

ATTACHMENT 9

Approved Local Limits

(k) Any stormwater, surface water, ground water, roof runoff, interior or exterior footing drainage, subsurface drainage, cooling water, or unpolluted industrial process waters to any sanitary sewer.

Sec. 16-62 Maximum constituents.

(a) The concentration in wastewater of any of the following constituents shall be limited to the following (See also Sec. 16-63):

	INDUSTRIAL POINT SOURCE	
	In MOT Service Area 30-DAY AVERAGE mg/l	In Wilm. Service Area 30-DAY AVERAGE mg/l
Aluminum	1.50	-
Arsenic	1.00	0.24
Beryllium	0.007	-
Cadmium	0.015	2.00
Chromium, Total	1.50	4.00
Chromium,VI	0.50	-
Copper	0.15	3.00
Lead	0.50	9.00
Mercury	0.001	0.045
Nickel	0.020	1.00
Selenium	0.25	-
Silver	0.015	-
Thallium	5.0	-
Zinc	1.00	14.00
Ammonia as Nitrogen	35.00	35.00
Cyanide, Total	0.30	0.49
PCB	0.0001	-
Phenolics	10.00	10.00
BOD	350	350
Suspended Solids	500	500

(b) Notwithstanding the limitations set forth in subsection (a) above, the Director may impose additional limitations on mass loading of BOD and other constituents. However, the Director may accept the discharge in wastewater of constituents in excess of such concentrations provided that the Director determines that such increased concentrations are compatible with the wastewater treatment process. Nothing in this article shall be construed as preventing any special agreement or arrangement between the Director and any person whereby an industrial waste of unusual strength or character may be accepted by the

ATTACHMENT 10

Industrial Inspection Report

Johnson Controls

INDUSTRIAL USER VISIT REPORT			
Date:	June 27, 2002	Time:	2:50 PM - 4:00 PM
Industry name:	Johnson Controls		
Address:	700 North Broad Street Middletown, DE 19709		
Contact name(s)	Title	Phone	
Rick A. Thompson	Plant Manager	302-378-9885, ext.4001	
Bill Gilbert	Technical Services Manager		
Tom Brossman	Senior Engineer		
Harshad M. Desai	Environmental Engineer	302-376-4049	
Persons conducting visit:			
Name	Title	Affiliation	
John Lovell	Pretreatment Coordinator	EPA	
Dave Bowie	Environmental Engineer I	New Castle County	
Purpose for visit:	Routine inspection as part of the audit of the New Castle County pretreatment program.		
Brief facility description:	Facility manufactures lead acid batteries. Lead plates are cast, and paste is applied. The plates are inserted into the batteries and then the batteries are filled with acid. Batteries are then further assembled, washed, packaged and shipped. Wastewater treatment consists of pH adjustment, chemical addition (flocculent and polymer), and settling. Sludge is sent to a filter press with the filtrate going back to the treatment system. The pressed sludge is sent to a lead smelter.		
Comments/Findings:	- All wastewaters from acid filling processes is reported to be sent to the regeneration area with no discharge to the POTW. - Process wastewater to treatment reportedly consists of the battery wash, employee showers, lab wastes, wash-up sinks, and water fountains in the process area. Cooling tower backwash also reportedly discharged to treatment. -The sample point is after treatment and prior to mixing with other wastewaters; sanitary wastewater is reportedly discharged through a separate sewer line. - The cooling tower backwash and possibly the water fountains would be considered dilution wastewater, but since the County applies the categorical standards as mass-based standards, the addition of dilution water would not change the mass limits. Therefore, the applied limits appear to be appropriate for the sample point.		

ATTACHMENT 11

Audit Action Items

AUDIT ACTION ITEMS - New Castle County

Requirement	Status	Completion Date (Estimate)
Legal Authority		
Revise variance language in the County ordinance		
Revise County ordinance in accordance with legal authority review		
Submit ordinances for Odessa and Townsend		
Application of Standards		
Adopt revised local limits		
Apply the more stringent of the categorical standards and the local limits in the permits		
Document any variances granted to the users		
Apply OCPSF standards as mass-based standards		
Reevaluate categorical limits for any users subject to production-based standards		
Control Mechanism		
Revise permit form in accordance with permit form review		
Issue permits which are effective for 5 years or less		

June 2, 2003

Requirement	Status	Completion Date (Estimate)
Compliance Monitoring		
Ensure that County samples are analyzed in the County lab or an independent contract lab		
Determine flow during sampling for all users subject to mass-based limits		
Include name of sampler, sampling location, and analytical methods in the sample documentation		
Ensure that users resample and report within 30 days of discovery of a violation		
Document violation notifications from users		
Ensure that users monitor pH in accordance with their permits		
Ensure that sampling and analysis is repeated if detection limits are not low enough to determine compliance		
Verify production during inspections for users subject to production-based standards		
Evaluate implementation and effectiveness of spill/slug plans during inspections		

Requirement	Status	Completion Date (Estimate)
Ensure that slug plans are complete when they are required		
Ensure that copies of slug/spill plans are maintained in the file		
Review signatory authorizations for the users		
Enforcement		
Enforce in accordance with the approved ERP		
Reevaluate SNC for calendar years 2001 and 2002		
Publish any users found to be in SNC that have not previously been published		
Develop mechanism for identifying all violations		
Data Management & Public Participation		
None		
Resources		
None		